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New York is the world's premiere city of opportunity. It is the economic powerhouse that sustains America's position of leadership in the global economy and provides a universal gateway to the upward mobility that is uniquely possible in this country.

Mike Bloomberg, New York's first "businessman mayor" in more than a century, was uniquely qualified to preside over the city's successful transition to the New Millennium economy. No mayor of New York governs without any detractors. But Mike Bloomberg's supporters and critics generally agree that his financial and political independence enabled his administration to attract exceptional talent to city government, make decisions on the basis of data-driven analysis, and to undertake long-term, often visionary, planning and investment. At the end of this year, Bloomberg will leave the city far more energized and entrepreneurial than he found it in 2001.

This NYC Jobs Blueprint intends to lay the groundwork for the actions and partnerships that local government, organized labor, the private sector and civic groups will need to undertake in order to maintain New York's status as the pre-eminent city of opportunity over the next decade. It focuses on the five pillars that support the contemporary urban platform for opportunity: more and better jobs; better educated and skilled workers; infrastructure that provides greater connectivity and accessibility; a safe and affordable living environment; and an efficient, disciplined and well-run city government.

To prepare this Blueprint, the Partnership for New York City relied upon input from its members, who represent the city's business leaders and private sector employers, as well as a number of respected urban experts. It draws on information and analysis provided by the Brookings Metropolitan Policy Program and fact-based research and analytical support from McKinsey & Company. Together, we took a deep dive into demographic and economic data that has not been previously aggregated for comprehensive analysis. The result is a fresh look at the trends and developments of the last decade and projections that suggest how those will play out over the next ten years.

The incoming Mayor will encounter an economic and fiscal context that will be different and, in many respects, more challenging than the Bloomberg era. There will be more competition from other cities and greater internal demands on City resources. There will likely be less aid from Washington, DC and Albany. To cope with these pressures, the next generation of municipal leaders will need to focus on what unites the diverse elements of the city, not what divides us.

The aspirations of this plan are simple: a city economy that is growing in ways that generate more high quality jobs and a broader tax base; an excellent, fully integrated system of education, workforce development and job placement; and a safe, affordable and productive urban setting in which to live, work and build businesses.

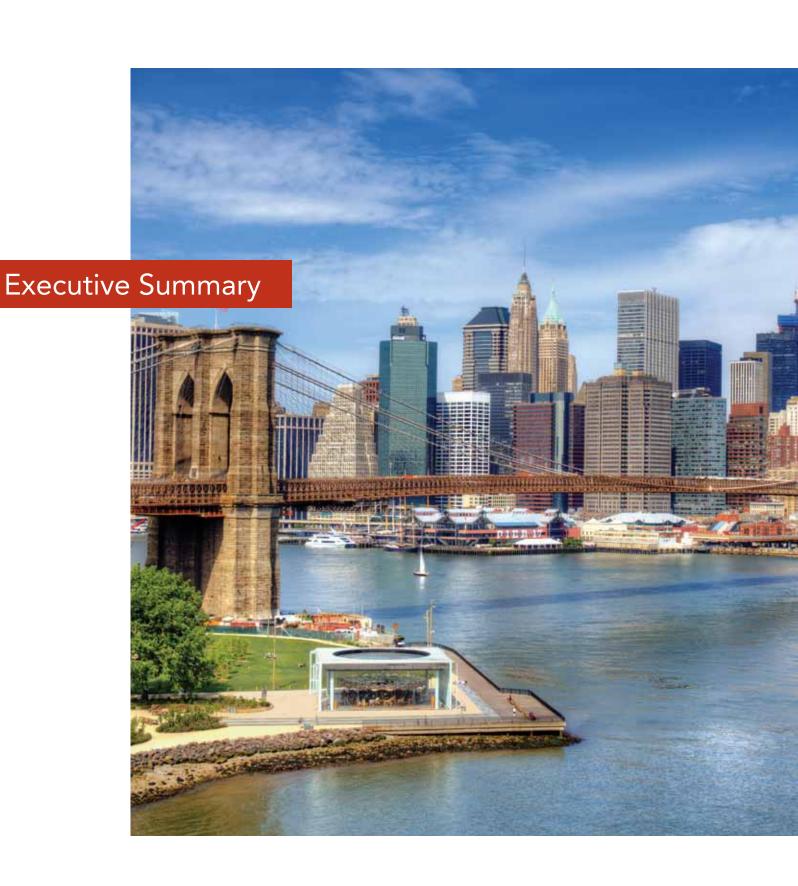
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Partnership for New York City





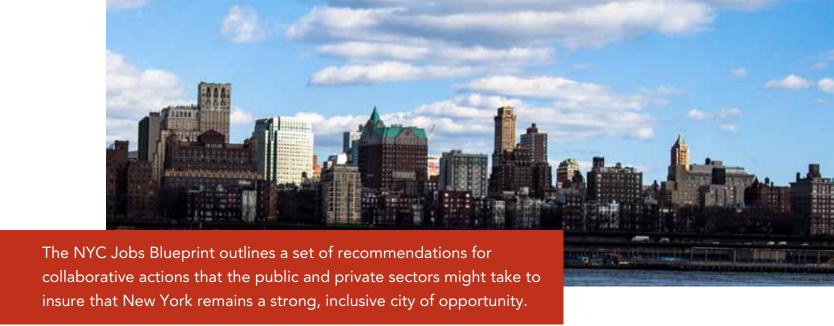
A current snapshot of the New York City economy reveals a vibrant center of commercial activity, creative output, and innovation. Despite two recessions, a global financial crisis and the terrorist attack of 9/11, the economy is growing at an annual rate of 3%, outpacing that of the United States and most developed countries. New York ranks as America's safest big city, its top tourist destination, and its second largest and fastest growing technology cluster outside of Silicon Valley. Population and private sector jobs numbers are at all time highs.

The city has grown stronger as a result of more rigorous management of municipal services and forward-looking investments in public infrastructure and amenities. More than 36% of the city's land area has been rezoned¹ and is ready to accommodate development of at least 80,000² new housing units and 41 million square feet of new commercial space.³ Columbia, New York and Cornell Universities are poised to invest tens of billions of private capital in significant institutional expansion, as are many of the city's nonprofit healthcare, research and smaller educational institutions.

The financial services industry is still the city's economic engine and healthcare one

of its largest employers, but the economy is diversifying at a fast pace. The most rapidly growing contributors to economic output over the past decade are high-tech, creative industries and tourism, although their share of the overall economy remains small. The city's waterfront has been rediscovered as an urban amenity. Neighborhoods and secondary business districts across the five boroughs are more vibrant and attractive than at any time in modern history, increasingly accessible by bikes, ferries and Bus Rapid Transit. Brooklyn has emerged as the borough of choice for a new generation of urbanites and both Lower Manhattan and the Far West Side are being transformed into model live-work communities.





Recent history and trends, however, suggest that the city's economic strength and forward momentum cannot be taken for granted. Despite an uptick in the past two years, population growth over the decade has been weak. Unemployment is too high, as is chronic poverty. Less than a third of public high school graduates are deemed college or career ready. Productivity—long the essence of the city's value proposition for business—is falling behind competing business locations. The city is losing both upper and middle class families because of high taxes and the rising cost of housing.

Although the city is a hotbed of digital startups, few young companies are scaling up to more than 30 or 40 jobs in the city. In fact, over the last decade, there was no net increase in the number of businesses employing more than 50 people locally. Rising costs of living and doing business and a difficult regulatory and legal environment are wearing on residents and employers alike.

The next decade will bring more intense global and domestic competition. Industries that anchor the economy—financial and professional services, media and technology, health and education, fashion and retail—are undergoing dramatic, often disruptive change. Federal and state aid to the city is becoming less certain, while the demands for public infrastructure investment and municipal services are increasing, putting extraordinary pressure on the local tax base.

This NYC Jobs Blueprint summarizes how the city economy has developed through the last decade and how the policies employed by the Bloomberg Administration were used to achieve job growth and diversified economic activity across the five boroughs; it outlines the challenges to continued growth that will confront the next Mayor; and, finally, it outlines a set of recommendations for collaborative actions that the public and private sectors might take to insure that New York remains a strong, inclusive city of opportunity.

Measures of Success: What the City Must Strive to Achieve by 2020

Real GDP Growth

3.1%

% CAGR per year since the recession (2009-2011), up from 1.7% per year over the decade (2002 - 2011)

RECENT HISTORICAL TREND

MODEST

3.4% 3.8%

AMBITIOUS

SUPPORTING RATIONALE

International peer cities (Shanghai, Singapore, Hong Kong, London, Toronto, Sydney, Paris and Berlin) have grown real GDP at 3.4% per year over the past decade (2002–2011), and have grown at 4.3% since the Recession (2009-2011); 3.8% is roughly the mid-point of these growth rates.

Productivity Growth

1.1%

% CAGR from 2002-2011

RECENT HISTORICAL TREND

MODEST

2.7% 3.0%

AMBITIOUS

SUPPORTING RATIONALE

The "modest" aspiration matches Silicon Valley's productivity growth of 2.7% over the past decade (2002-2011); 3.0% is the productivity growth necessary to reach real GDP growth of 3.8% while maintaining employment growth relatively in line with historical norms (0.8% per year would be needed; New York City had 0.6% per year employment growth from 2002-2011).

Middle-wage Job Creation

Jobs Target

-2.3%

MODEST (4.3%)

% CAGR from 2008-2011, 101,000 jobs

RECENT HISTORICAL TREND

Jobs Target

+61,000 +101,000

AMBITIOUS (7.2%)

SUPPORTING RATIONALE

61,000 jobs would restore the number of middle-wage jobs to 2005 levels, 101,000 jobs would restore to the peak of middle-wage jobs in 2008.

Unemployment Reduction

9.5%

as of January 2013

RECENT HISTORICAL TREND

MODEST

4.6% 4.2%

AMBITIOUS

SUPPORTING RATIONALE

4.6% was the low during the last business cycle (12/07-6/09), both for New York City and for the U.S. as a whole; 4.2% was Silicon Valley's low during the last business cycle (the lowest among peer U.S. cities).



Challenges Ahead

Obstacles to Business and Job Growth

- High costs and a tough regulatory and legal environment make New York City the most expensive place in the country to build a business. Overall costs are 1.5 times the national average; office rent and electricity are double the national average.
- New York City firms are not scaling up. Between 2003 and 2010, New York City saw no net growth in the number of firms with 50 or more employees. Of the 220,000+ businesses in the city, 195,000 or 88%, have fewer than 20 employees.

Education/Jobs Mismatch

- There is a growing shortage of qualified workers for available jobs. There will be an estimated 21% increase in NYC jobs that require an associate degree or higher by 2020.
- In 2012, only 28.6% of students graduating from public high school were deemed ready for college or a career; almost 80% of those who were admitted to community college required remedial education.
- In 2011, there were twice as many graduates of local colleges and universities with degrees in the humanities as in STEM majors, while the job demand is heavily weighted toward technology and math skills.

Infrastructure Modernization and Maintenance

- There is an estimated \$6.4 billion of additional capital work needed to achieve a state of good repair of infrastructure assets (exclusive of transit and public housing stock).
- The city's infrastructure and transportation systems require significant investment to address vulnerabilities revealed by Superstorm Sandy and to expand services to new centers of employment.

Threat to the Middle Class

- Job growth is primarily in high-wage and lowwage categories, with middle-wage jobs at risk due to competitive pressures on employers and availability of skilled workers at a lower cost in other regions.
- Middle class households (annual income of \$35,000–\$75,000) cannot keep up with rapidly rising housing costs.

Structural Budget Deficit/Reduced Federal & State Aid

- In 2015, the City is projected to have a budget shortfall of at least \$2.4 billion.
- Reduced Federal and State aid is likely to increase pressure on the local tax base.
- NYC's tax burden is already the highest in the country.



NYC Jobs Blueprint: Key Proposals



MORE & BETTER JOBS

- Build Urban "Tech Campus" Developments in Every Borough
- Replace Non-Strategic Economic Development Programs with Jobs Tax Credits
- · Reinforce the Financial Services Sector
- Accelerate Sector Diversity
- Expand Export Intensity
- Encourage New Manufacturing & Artisan Enterprise

- Promote Tech Startups
- Champion Diversity in the Tech Sector
- Establish Industry Partnerships for Economic Development
- Create a Commercial Rent Tax Credit
- Establish a Resource Center for Job Creators
- Create a Permanent Innovation Advocacy Organization



BETTER EDUCATED & SKILLED WORKERS

- Launch NYC 2020 Jobs Challenge— A Partnership between Employers & Educators
- Establish Outcome-Based Criteria for Education Funding
- Coordinate Education, Workforce Development & Job Placement Functions under a Chief Talent Officer



GREATER CONNECTIVITY & ACCESSIBILITY

- Pursue Universal & Redundant Connectivity
- Advocate for Improved Airports
- Redesign the Transportation Network
- Tap Private Sector Resources



SAFE & AFFORDABLE LIVING ENVIRONMENT

- Optimize Existing Housing Resources
- Reduce Costs of Housing Construction
- Prioritize Long-Term Planning & Sustainability
- Improve Services in High Crime Communities



EFFICIENT, DISCIPLINED & WELL-RUN CITY GOVERNMENT

- Eliminate the Structural Budget Deficit
- Recruit Strong, Tech-Savvy Managers
- Reform Property Taxes
- Evaluate City-Owned Property for Revenue Potential & Economic Development
- Redesign Community Service Delivery for "Collective Impact"
- Mobilize Business-Labor-Citizen Lobbying Efforts to Support the City's Agenda in Washington, DC & Albany





During the past decade, the New York City economy has experienced steady growth, despite turbulence in the global and national economies. Innovation in core industries, effective marketing of the city and a burst of entrepreneurial startup activity have been the driving forces.

The city's Gross Domestic Product (GDP or economic output) grew at an average annual rate of 1.7% over the past ten years and at over 3% annually for the past three years, outpacing the country's 2.1% average rate of post-recession GDP growth.⁵

Today, at \$583 billion, New York boasts the largest city economy in the world.⁶ Of three domestic peers (Chicago, Los Angeles, Silicon Valley) only California's Silicon Valley, with its concentration of technology companies, grew faster than New York during this period. The city's private sector added 357,000 jobs since 2003 and, in 2012, the total number of private sector jobs reached 3.332 million, surpassing the 1969 employment peak of 3.251 million.⁷

The financial services industry dominates the city economy. Over the decade, it experienced 2.3% annual growth in terms of its contribution to the city's GDP, although job numbers have been flat.8 Recent growth has come from the asset management and insurance sectors, rather than the traditional mainstays of banking and securities. The asset management industry grew annually by 6.2% over the last decade and employment increased by 4.5%.9 In contrast, the securities sector has experienced minimal growth (0.5%) and has seen a decline in jobs (-2%).10 New York's share of global IPO listings has nearly halved over the last decade (currently 22% of the total) as Asia has grown in importance.11

The fastest growing sectors in terms of economic output are high-tech, creative industries (media, arts, fashion) and tourism. High-tech has led the way, with annual growth averaging 5.3% over the past decade. The city still accounts for only 3% of national high-tech industry output, leaving considerable room for further growth. The centerpiece of local tech activity are internet

companies, including digital media, e-commerce, social networking and ad tech, which account for 85% of the city's high-tech startups. ¹³ Tech entrepreneurs are attracted to New York because it is the center of the global advertising industry, it has a deep creative talent pool, and New York's legacy industries—finance, media, retail, and professional services—represent the biggest market of first adapters of new technology.

New York City now commands 13% of national market share for economic output in the creative sector. ¹⁴ Growth in creative industries (4.1% per year) was led by a surge in the film and broadcasting sector, which grew 6.2% over the decade, thanks largely to a New York State 30% production tax credit and an aggressive marketing and services program run by the Mayor's Office of Media & Entertainment. ¹⁵ Since 2002, television production activity has increased by 82%, amplified by average industry salaries of \$111,000. ¹⁶

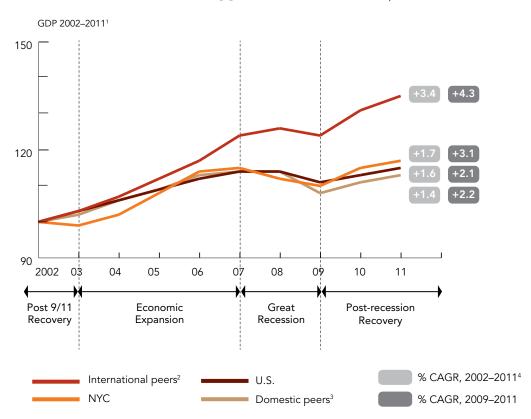
Tourism has grown steadily at an average rate of 4.1% per year, with New York passing a new milestone of 52 million visitors in 2012.¹⁷ Visitors to the city generated an estimated \$55.3 billion in total economic impact, with direct spending reaching \$36.9 billion.¹⁸ A record 33% share of all U.S. visitors from abroad came to New York City.¹⁹ The volume of international visits from emerging markets has risen substantially since 2006 with a 447% increase from Brazil, 442% from China, and 258% from Argentina.²⁰ The Metropolitan Museum of Art, for example, saw record breaking attendance for the second year in a row with 6.28 million visitors in 2012.²¹

High productivity, high salaries and multiplier effects are what make the tech, creative and tourism sectors such important contributors to economic growth.

In terms of jobs, these sectors together only represented 12.2%, or 462,000, of the city's jobs at the end of 2011.²² All these sectors offer salaries that exceed average local earnings, with tourism having the lowest average wage at \$52,000, which is still roughly \$7,000 more a year than the average city salary.²³ Creative industries actually lost jobs over the decade at the rate of 0.5% a year largely due to flat employment in the media and publishing sector and continued decline of traditional apparel manufacturing, which has fallen nearly 10% per year since 2002,24 (mass manufacture of apparel has relocated to lower cost regions and is not coming back to the city, as distinguished from fashion design and very limited, high end or sample production that is thriving in New York.)

On the negative side, the last decade saw a 4.5 pecentage point decline in contribution to GDP from several "traditional" sectors: construction/real estate, government, and education. The healthcare sector, one of the city's largest employers, has seen its share of GDP rising at 2.3% annually over the last decade.²⁵ Growth has continued despite hospital closures, with jobs shifting to outpatient care, but is heavily dependent on federal and state funding that is clearly at risk. Professional and business services, a significant creator of new jobs in the past decade, should also continue to grow, assuming their primary customers in financial services and other legacy industries remain strong. While traditional manufacturing has continued to decline, technologyenabled "new" manufacturing shows promise, with a number of entrepreneurial startups calling New York City home.

EXHIBIT 1.1: NYC GDP Growth Has Outpaced Domestic Peers and the Nation, but Lagged International Competitors



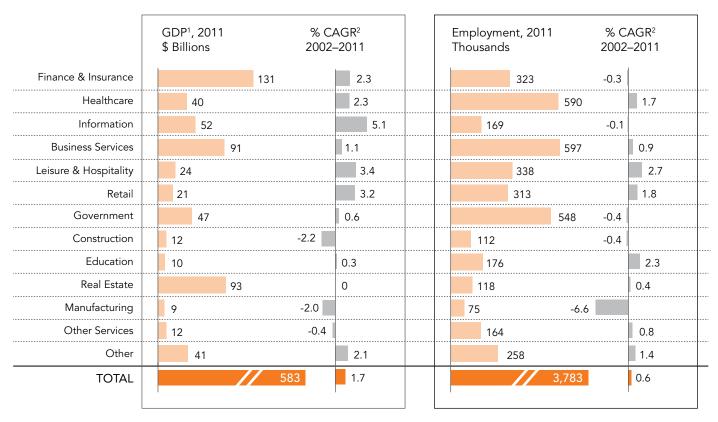
NOTES:

- 1) Real GDP, Indexed to 2002
- 2) International peers: Shanghai, Singapore, Hong Kong, London, Toronto, Sydney, Paris, and Berlin
- 3) Domestic peers: Chicago, Los Angeles, and Silicon Valley
- 4) The Compound Annual Growth Rate (CAGR) is the average annual growth rate (positive or negative), or the year-over-year growth rate, calculated by taking the nth root of the total percentage growth rate, where n is the number of years in the time period being considered.

SOURCE:

McKinsey analysis of data from the Canback Global Income Distribution Database (C-GIDD) & Moody's Analytics

EXHIBIT 1.2A: NYC's Economy Has Grown but Jobs in Major Industries Have Been Lost Over the Last Decade



NOTES:

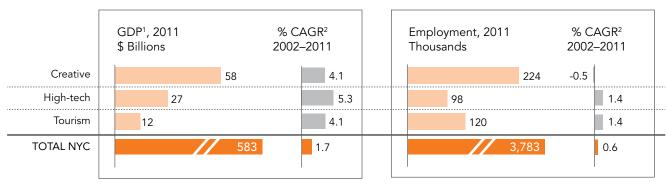
1) Nominal GDP

2) Real GDP

SOURCE

 ${\sf McKinsey\ analysis\ of\ data\ from\ the\ U.S.\ Bureau\ of\ Labor\ Statistics\ (BLS)\ \&\ Moody's\ Analytics}$

EXHIBIT 1.2B: New Economy and High-growth Sectors Saw a Greater Rate of GDP and Jobs Growth Over the Decade than all Industries Combined



NOTES:

The creative, high-tech and tourism sectors were created through McKinsey's analysis of traditional industry sectors to show the share of jobs and impact on GDP by aggregating 4 digit NCAIS codes.

Creative includes relevant codes from the fashion, media and arts industries. Tourism includes codes from the arts, entertainment & recreation industries as well as from accommodations, travel and sightseeing. High-tech includes codes from the information, technical services, computer manufacturing and telecommunications.

1) Nominal GDP

2) Real GDP

SOURCE:

McKinsey analysis of data from BLS & Moody's Analytics

RESILIENCE IN THE FACE OF CRISIS AND COMPETITION

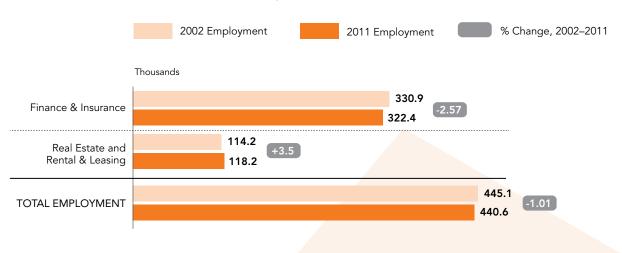
New York has demonstrated remarkable resilience during a decade marked by terrorism, recession, financial crisis and a technological revolution that is transforming the city's anchor industries. The destruction of the World Trade Center inflicted massive economic damage and accelerated a financial downturn that, in 2001, was already underway. Yet New York's economy bounced back, and GDP grew 3.8% annually from 2003 to 2007.²⁶ An ambitious and comprehensive rebuilding program, financed by a combination of government and private investment, was responsible for this rapid recovery.

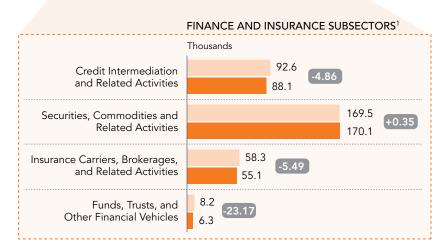
After 9/11, there were indications that London was surpassing New York as the global financial capital. Fear of London's competitive edge was reinforced when that city won the 2012 Summer Olympics bid. But London failed to pull away in

the competitive stakes, despite far greater financial and policy support from their national government than New York gets from Washington, DC. The 2012 Cities of Opportunity benchmarking study, issued by the Partnership for New York City and PwC, ranks New York and London in a virtual tie for economic advantage, with the real threat to both cities coming from the emerging financial centers of Asia and, in New York's case, smaller domestic cities like Austin and Seattle.²⁷

The 2008 financial crisis and the Great Recession interrupted real estate development and construction activity across the city, delaying the financing, marketing and build out of important projects like the new World Trade Center site, Atlantic Yards, Hudson Yards, Alexandria Center (the city's first science park) and hundreds of smaller residential and commercial projects, most of which are finally moving forward. Some 100,000 New Yorkers lost their jobs during the national 2008–2009 recession, the city lost several

EXHIBIT 1.3: Financial Services Employment Was Nearly Flat Over the Decade, but Remains an Essential Asset





NOTE: 1) Numbers may not sum due to rounding. SOURCE: NYS Department of Labor



major financial institutions, and the brand of Wall Street was tarnished.²⁸ Although Wall Street was the epicenter of the financial system meltdown, New York rebounded faster than the rest of the country. The city gained 250,000 jobs between 2009 and 2011, 150,000 more than were lost, and at twice the national rate of yearly job growth.²⁹

Today, unemployment remains high, nearly five percentage points more than its lowest levels during the last business cycle and 1.5 percentage points higher than the national average.³⁰ Some 15.8% of New Yorkers are estimated to be unem-

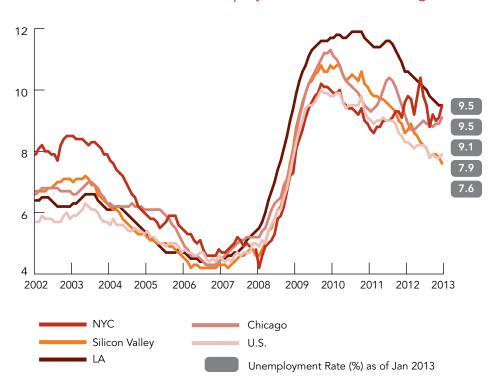
ployed or underemployed—an increase of nearly 7% from 2007.³¹ Residents who are ill-prepared for the high-tech work environment, or lack other skills required by employers, increasingly are in temporary and part-time jobs or freelance assignments, often earning less than is required to live in a high cost urban environment.

In response to the seeming contradiction between robust job creation and high unemployment, the Independent Budget Office (IBO) identified the impact of a growing labor force participation rate, driven by an increase of nearly 60,000 new city residents and re-entry of job seekers who had previously dropped out of the market.³² In short, employment grew, but not fast enough to absorb all the new job seekers.

Today New York is navigating a new round of challenges, both natural (Superstorm Sandy) and man-made (fiscal pressures at all levels of government). The city's economic performance is good, but not unaffected by national and global forces that have increased economic inequality and poverty across the United States and most of the developed world. In 2011, roughly 20.9% of New Yorkers—or 1.73 million people—were officially classified as poor, an increase of 2.2% from two years earlier, compared to a national poverty rate of 15.0% that grew 0.7% in the same period.³³ New York has a lower poverty rate than the nation's five other largest cities, but its poverty statistics are nonetheless troubling.³⁴

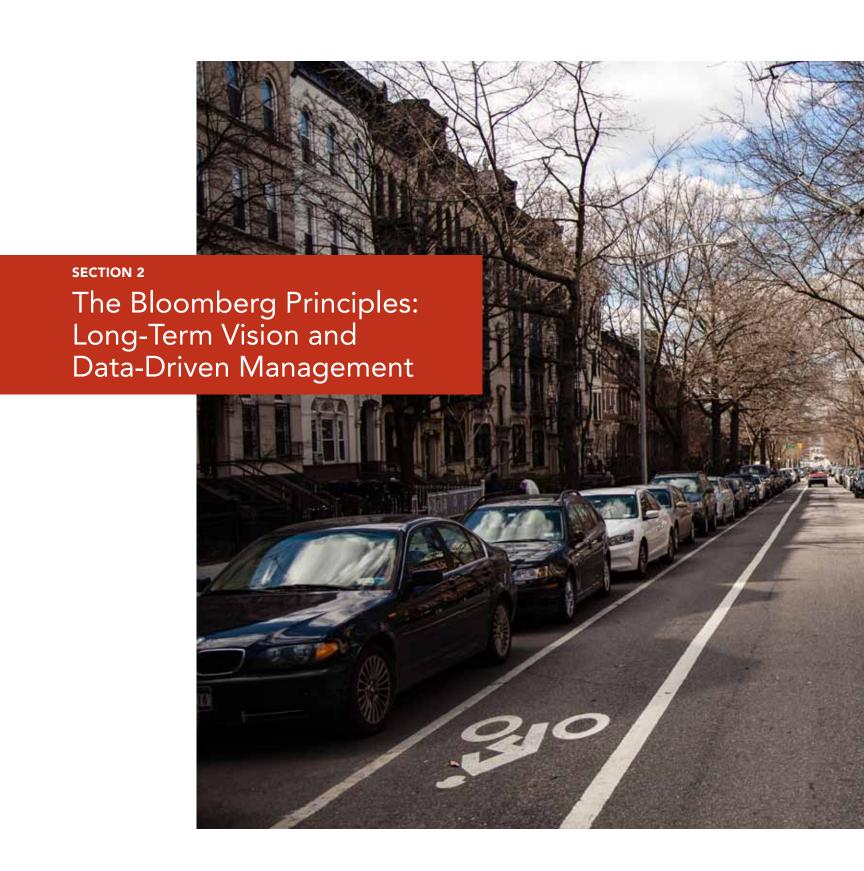
In sum, the city is in a position of strength compared to global and domestic competitors. But this could change quickly, and the next city administration must have a plan and a network of partnerships in place in order to respond quickly and effectively to the inevitable challenges ahead, which are discussed in Section 3.

EXHIBIT 1.4: NYC's Unemployment Rate Remains High



NOTE: NYC defined as 5 boroughs; Silicon Valley defined as San Jose MSA & San Francisco MSA; Chicago and LA defined as their respective MSAs.

SOURCE: McKinsey analysis of BLS & Moody's Analytics





The Bloomberg Administration governed with a long-term vision for the city in a global context and an immediate focus on public safety and "livability" as the baseline conditions for economic growth. It advanced this agenda by leveraging the city's many assets, including an extraordinary concentration and diversity of talent, multiple global industry headquarters, and a cluster of great universities, medical research and cultural institutions.

The Administration drew heavily upon ideas and resources from the private and nonprofit sectors, resulting in economic development activity far beyond what city government could have accomplished on its own. In the process, the City gained "stickiness" with industry leaders and emerging entrepreneurs that helped the local economy weather the turbulence of the past decade.

Realizing the vision of New York City as a center of global innovation and economic growth was a shared mission of the whole Bloomberg team, not just the Economic Development Corporation (EDC). This was reinforced by having the Deputy Mayor for Economic Development also oversee the Departments of City Planning, Finance, Small Business Services (SBS), Transportation, and Housing.

As the Bloomberg mayoralty ends, there is concern in the business community that the next Mayor will tip in the direction of one policy extreme, toward a more intrusive, higher cost government without an offsetting commitment to quality of life and pro-growth policies. Rather than governing from the political right or the left, Bloomberg seemed to follow his instincts. For example:

The Administration toughened up on discretionary subsidies to business and inserted serious enforcement and clawback conditions into pre-existing tax incentive programs that yielded \$85 million in returns to the city from companies that failed to meet their com-

mitments.³⁵ At the same time, to encourage private investment and job creation, it invested heavily in infrastructure and community improvements associated with sports facilities and other redevelopment projects, which critics suggest provide relatively modest economic benefits for the city.

- The Administration aggressively rezoned the city's land area and supported eminent domain actions to assemble sites for private development while carrying out down-zoning actions, imposing design criteria and expanding historic preservation designations that have reduced development potential in communities across the city.
- In 2002, the Administration pushed through an 18.49% property tax increase to deal with the revenue shortfall and security needs confronting the city after 9/11.³⁶ As the economy improved, it established budget reserves to avoid income tax increases and issued property tax rebates to homeowners, but simultaneously allowed commercial property tax assessments and fines on small business to skyrocket.

In short, the Administration has often strayed from laissez-faire, pro-business orthodoxy. But it has maintained the confidence of job creators by championing the city's key industries and great institutions and by focusing on the safety and quality of life issues that are essential to a healthy business climate.

FOCUS ON GEOGRAPHIC AND SECTOR DIVERSITY

The 9/11 terrorist attack illustrated the need to make the city less vulnerable to the "boom and bust" cycles of Wall Street and to create new centers of economic activity outside the highly concentrated Manhattan central business districts where an attack, a power failure, or the paralysis of growing traffic congestion could inflict disproportionate damage on the entire five-borough economy.

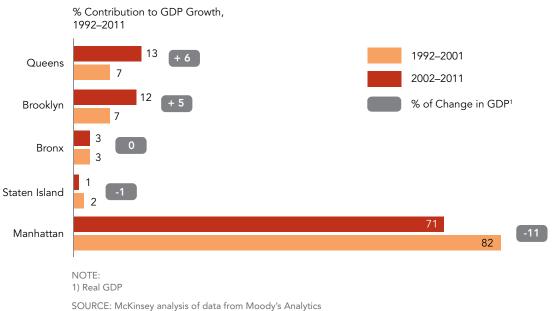
Geographic diversity initiatives were incorporated in the vision for the city's 2012 Olympics bid, based on a plan for turning derelict sites across the five boroughs into Olympic venues and permanent new hubs of economic activity.³⁷ The waterways that historically separated the city's boroughs were reconceived as connectors and the waterfront as an asset to be reclaimed. The Olympic bid failed, but the ambitious plans for building out the Far West Side, as well as the Brooklyn and Queens waterfronts, proceeded.

City-initiated rezoning actions reversed decades of inactivity on the formerly industrial waterfront. Long derelict sites such as Hudson Yards, Greenpoint-Williamsburg, Brooklyn, and Hunters Point, Queens, attracted major private investment in commercial and residential redevelopment and

public amenities. Targeted public investments sought to maintain manufacturing and shipping uses in select locations, such as the Brooklyn Navy Yard, the new Brooklyn Cruise Ship Terminal, the Brooklyn Army Terminal and New York Container Terminal. In the process, ferry services were expanded to provide connectivity to areas that were poorly served by public transit. Moving inland, there were also an unprecedented number of City-sponsored planning and rezoning initiatives to stimulate redevelopment in places like Downtown Brooklyn, Jamaica Center, Central Harlem and, most recently, Midtown East.

The results of far-reaching planning, zoning and capital investment activity have been substantial. Between 1992 and 2001, Brooklyn, Queens, the Bronx and Staten Island accounted for only 18% of New York City's real GDP growth.38 By 2012, the "outer" borough contribution had increased to 29% of GDP growth, driven by growth in Brooklyn and Queens.³⁹ From 2002-2011, job growth was greater outside Manhattan than within it, with the Bronx seeing more than double (11.7%), and Brooklyn nearly triple (16.4%) the rate of growth in Manhattan (5.7%) from 2002 to 2011.40 The number of local Business Improvement Districts (BIDs) grew by 50% since 2002 to 67, mostly outside Manhattan, investing over \$100 million annually in services to neighborhood commercial strips.⁴¹

EXHIBIT 2.1: Brooklyn & Queens Have Increased
Their Contribution to NYC's GDP Growth Over the Last Decade



Creating a Life Sciences Cluster

New York is home to the nation's largest concentration of world-class medical research institutions and top scientists, but this has never translated into development of a local life sciences industry. A 2001 study by the Partnership Fund for New York City (Partnership Fund) identified only about 2,000 local jobs in commercial life sciences, as compared to 71,000 in Silicon Valley and 25,000 in Greater Boston. Discoveries by New York scientists were being commercialized elsewhere, largely because there had been no commitment by government or the medical research institutions to create a local industry cluster. The Partnership Fund study identified two obstacles to development of a life sciences cluster: the anti-commercial culture of the city's academic medical centers; and the lack of commercial lab space to accommodate life science companies. Sience 2015

The Bloomberg Administration, working with the Partnership Fund and leaders of medical research institutions, set out to address both issues. The City and State provided incentives for development of the first commercial science park, the Alexandria Center, on the City-owned Bellevue Hospital campus. In addition to a long-term lease and property tax abatements, the City provided infrastructure funding to move sewers, an ambulance entrance and make other site improvements. The State provided \$33 million in grants and other tax incentives.⁴⁷ The private developer committed \$700 million to build and finance what will ultimately be a million square foot facility.⁴⁸ At the same time, the Partnership Fund was working with the major research institutions to encourage industry partnerships, entrepreneurship and local commercialization.

Alexandria's first tower was completed in 2011 and the second tower is under construction, housing research labs of Pfizer, Eli Lilly, and Roche Pharmaceuticals and including both conference and incubator facilities. The Alexandria Center represents the core of an emerging life sciences cluster in the city that is reinforced by public and philanthropic investments in nonprofit initiatives such as the Structural Biology Center, the Stem Cell Foundation, and the Genome Center. Employment in the sector reached more than 11,500 by 2010.⁴⁹ While still small, jobs in life sciences have a huge economic multiplier effect and cluster activity further strengthens New York's educational and healthcare institutions that employ 260,000 New Yorkers and attract more than \$2.3 billion in federal research grants annually.⁵⁰



In addition to diversification of economic activity across the five boroughs, there have been deliberate efforts to support the growth of new industries. To spur startup activity, the City provided modest support for a dozen high-tech business incubators that have housed nearly 500 startups.⁴² It has launched "jump start" and "boot camp" programs for entrepreneurs, promotional competitions, and networking activities that have added a new dimension to New York's traditionally corporate business culture. These programs have been synergistic with land use and public infrastructure investments on Manhattan's West Side, in Brooklyn, and Long Island City, helping to generate "buzz" and creating clusters of new economy businesses in long stagnant areas.

EDC has seen its staff and responsibilities expanded significantly beyond the agency's historic configuration. They have established industry desks and working relationships with business leaders, hired consulting firms to develop ideas for enhancing key sectors, and created hundreds of initiatives to demonstrate support for core industries and to promote the emerging entrepreneurial ecosystem.⁴³ EDC has initiated outreach to foreign international markets that were likely sources of foreign investment and turned a favorable spotlight on companies from around the country and the world that were expanding in New York.⁴⁴

It is conventional wisdom that government is not good at picking winners in the economic development arena and the record of direct government investment in business is unimpressive. But the experience of the past decade demonstrates how government can invest intelligently in the infrastructure and supportive environment that encourages business formation and growth **if** its decisions are informed by private sector expertise and rigorous market analysis, as opposed to wishful thinking or politics.

LEVERAGING THE CITY'S ASSETS

The most successful economic development initiatives are those that effectively reinforce and leverage the city's economic assets. In New York, these assets include the concentration of global headquarters companies in multiple industries, world class educational, medical and cultural institutions, the growing entrepreneurial community, and the city's prominent global brand.

The presence of 45 U.S. Fortune 500 financial and corporate headquarters operations is the basis of New York's global economic clout.51 They are the magnetic force that attracts other job creators, such as professional and business services, software application developers, and foreign companies. Aside from federal "Liberty Bonds" that were used to reinforce the corporate and financial sector after the security risks generated by 9/11, the Administration has relied largely on cultivation and advocacy as the preferred tools for corporate retention. While many politicians bash big banks, Mayor Bloomberg has employed his bully pulpit to argue that nothing can replace the solid middle-income jobs and contributions to the city tax rolls of the financial services industry. Mayoral attention and support has also been lavished on other key industries: media, information services, health, education, fashion and retail, arts and culture, hospitality and tourism. The business community appreciates this support and the result is a much stronger commitment to stay and grow in New York.

EXHIBIT 2.2: NYC is Home to the Highest Concentration of US Fortune 500 Companies in the Country

Number of US Fortune 500 Headquarters by City



SOURCE: McKinsey analysis of data from Fortune magazine

The Administration has also effectively exploited and enhanced New York City's iconic brand. NYC & Company was restructured and received serious resources to launch an international tourism marketing campaign. They helped carry out high profile events, such as The Gates exhibit in Central Park and Fashion's Night Out, and to develop new international destinations such as the High Line and Times Square. A retention partnership featured a marketing alliance with JetBlue, "New York's Hometown Airline." Spurred by these creative efforts, the tourism industry has grown from 320,000 jobs in 2011 to an estimated 356,000 jobs today.⁵²

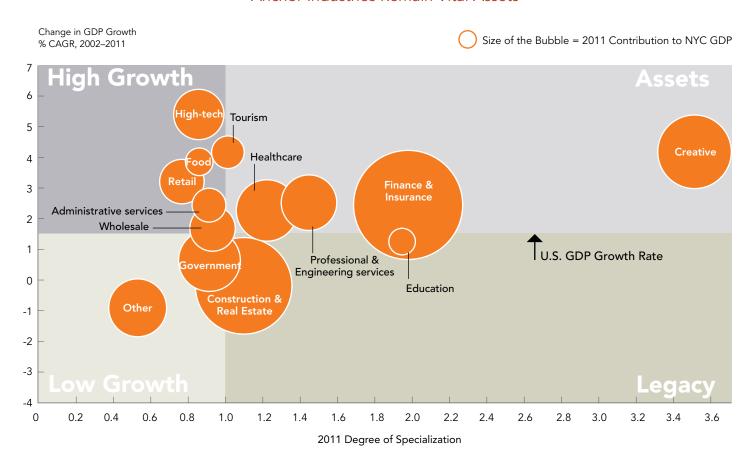
THE PURSUIT OF BIG IDEAS

The Bloomberg Administration has pursued and largely achieved—a series of big, audacious goals: topping 50 million tourists, establishing New York as a high-tech innovation capital, and making credible claims that New York City is the greenest, healthiest and safest big city in America, if not the world.

Big ideas started early with introduction of the 311 system, where a live person responds to questions and complaints about city services (and just about anything else). Nearly 22 million annual calls are logged by 311, allowing City agencies to anticipate and respond to issues far more effectively.⁵³ Along with other tools, such as Citywide Performance Reporting Online, 311 resulted in a better managed city, where resource allocation and performance evaluation can be largely data-driven.

PlaNYC 2030 was another ambitious undertaking, engaging representatives of industry, labor, environmental groups and communities to help develop and implement a long-term plan for the city's future as a sustainable urban environment.⁵⁴ The plan proposed to reduce

EXHIBIT 2.3: High-tech and Other New Sectors on the Rise While Anchor Industries Remain Vital Assets



NOTE: Degree of specialization is calculated by dividing the % of NYC sector employment by the % of U.S. sector employment; value > 1 indicates higher NYC job concentration than the U.S.

SOURCE: McKinsey analysis of data from BLS & Moody's Analytics



the city's 2005 carbon footprint by 30% by 2030, through a variety of long-term initiatives that range from building code reform to upgrading wastewater treatment plants. More than 15% reduction in emissions has already been achieved, representing the lowest per capita greenhouse gas emissions among major U.S. cities. 55 Ultimately, this will translate into reduced energy costs and a more globally competitive city. An important aspect of this effort was the creation, by local law, of the Mayor's Office of Long Term Planning and Sustainability, which is charged with the pursuit of objectives that transcend short-term thinking. 56

Quality of life initiatives have done much to transform the stereotype of New York from a dense, cold urban center to a highly livable city. The City has created more than 300 miles of bike lanes⁵⁷, as well as pedestrian-friendly streetscapes and new public spaces. Since 2002, the City has added more than 730 acres of new parkland and over 75% of New Yorkers now live within a ten-minute of walk of a park.⁵⁸ New Yorkers have a record high life expectancy rate, 2.2 years longer than the national average.⁵⁹ Improvements in the public education system and expanded school choice have made the city more family-friendly. Major crimes have been cut in half.⁶⁰ For many employers, overall livability and the desire of talent to be here have supplanted business needs as the primary reason for keeping jobs in the city.

There has been a record \$88 billion of improvements to roads, sewers and public space and buildings. ⁶¹ Through the New Housing Marketplace Plan, the city is building or preserving 165,000 affordable housing units (15,000 to 18,000 annually). ⁶² Private, market-rate housing production is slowly rebounding from the recession, with the Buildings Department issuing about 10,600 residential construction permits in 2012, or 31% of the 2008 peak of 33,910. ⁶³

Lower Manhattan has been transformed into a world class livework community and the city's fastest growing neighborhood, with population doubling in the decade after 9/11.64 Through a novel tax increment financing scheme, the City captured benefits from the value created by the Hudson Yards rezoning on the Far West Side, and is using proceeds to help finance

the \$2 billion extension of the #7 subway line—the transit investment with the largest projected economic return of any that is underway in the city. 65

In the business community, no current set of projects are considered more important than those launched under the Applied Sciences initiative, through which the City has established partnerships with great universities that will more than double the number of engineering graduate students and faculty in the city, insuring its future status as a global center of innovation.

The Administration has also taken substantial ownership of workforce development and training, moving beyond the city's traditional role as a passive conduit for state and federal funding. Through SBS, it established eighteen Workforce1 Career Centers that, working with nonprofit and private contractors, have placed more than 160,000 New Yorkers in jobs—more than half in the last three years.66 With private philanthropic funding, the Mayor created the Center for Economic Opportunity, to explore innovative solutions to the education, health and employment issues confronting the city's poorest residents. When it comes to public and undergraduate education, there has been a greater focus on preparing students for employment in growth sectors where there is an unmet demand for skilled labor. The City has partnered with the City University of New York (CUNY) and the private sector to launch several 9-14 schools and is also rolling out a software engineering pilot program in 20 schools modeled after the Academy for Software Engineering that opened in 2012.67

In sum, the Bloomberg Administration will leave a solid foundation of industry relationships, greater geographic and sector diversity, and "innovation economy" initiatives for the next Mayor to build on. It has invested heavily in infrastructure and amenities, parks and streetscape improvements, and has launched sustainability initiatives that will define the parameters of the city's physical and economic growth for decades to come. But changing demographics, increasing fiscal challenges and global competition will require a new blueprint for jobs, the outline of which is suggested in the final section.



Applied Sciences NYC

Applied Sciences NYC is a "game-changing" investment to insure that the city has sufficient engineering talent to be a global center of innovation in the 21st Century. Silicon Valley has nearly four times the concentration of engineering jobs as a percentage of its workforce than New York City does.⁶⁸

In December 2010, the city issued a challenge to top institutions from around the world to build a new or expanded applied sciences and engineering campus in New York City. The competition winner would be awarded a package of city-owned land, up to \$100 million of City capital, and the full support of the City to make the project a reality. The City received seven qualifying responses from 17 world-class institutions and selected three winners:

• Cornell Tech: A partnership of Cornell University and the Technion University of Israel will invest \$2 billion in a two million square foot campus on Roosevelt Island that will house hundreds of faculty and staff and 2,000 full-time graduate students. Over the next three decades, Cornell Tech is projected to create 20,000 construction jobs, 8,000 permanent jobs, and generate nearly 600 spin-off companies resulting in tens of thousands of additional jobs. The campus will also create a \$150 million venture fund for New York startups.⁶⁹ Classes are already underway in temporary quarters at the Google offices.

- NYU-Center for Urban Science & Progress (CUSP)⁷⁰: New York University leads an international consortium that will convert an old Metropolitan Transportation Authority (MTA) building in Downtown Brooklyn into 150,000 square feet of classrooms, offices and lab space, with another 40,000 square feet dedicated as an incubator for businesses spun off by CUSP-related research. CUSP is projected to create 2,200 construction jobs, 900 permanent jobs and generate 200 spin-off companies—creating another 4,600 permanent jobs.
- Columbia Institute for Data Sciences &
 Engineering: Columbia University will expand
 its engineering space by 44,000 square feet and
 create 75 new faculty positions, and create five
 new areas of study and research which will be
 crucial to New York City's innovation economy in
 the 21st century, including a New Media Center,
 a Smart Cities Center, a Health Analytics Center,
 a Cyber Security Center, and a Financial Analytics
 Center.

Over the next three decades, these projects will collectively generate more than \$33 billion in overall economic impact, 48,000 Jobs, and nearly 1,000 spin-off companies. Additionally, the new facilities will more than double the existing number of full-time graduate engineering students in New York City to over 5,600 and more than double engineering faculty in New York City to over 700.71





Like any front runner, New York City is vulnerable to internal threats and to external competitors that are hungry for the talent, jobs and headquarters companies that make New York a global leader. Cuts in federal and state aid and a growing structural budget deficit will make it harder for the next mayor to deliver on the city's promise of opportunity for residents and businesses alike.

Key threats to the economy could come from several sources: slowdown in growth of the city's most productive sectors (especially financial services); accelerated loss of mid-level jobs and middle class households; failure of small and startup businesses to scale and become major job creators and tax revenue producers; and deterioration in city services and public infrastructure.

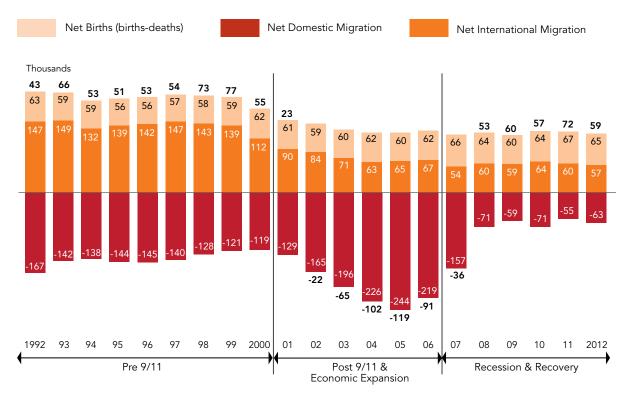
The factors that increase the city's vulnerability to these threats include the high cost of living and doing business; failure of the educational and immigration systems to produce an adequate supply of skilled labor; and an uncompetitive tax and regulatory environment.





EXHIBIT 3.1: Population Has Been Driven by Lower International Immigration and Shifting Domestic Migration Patterns

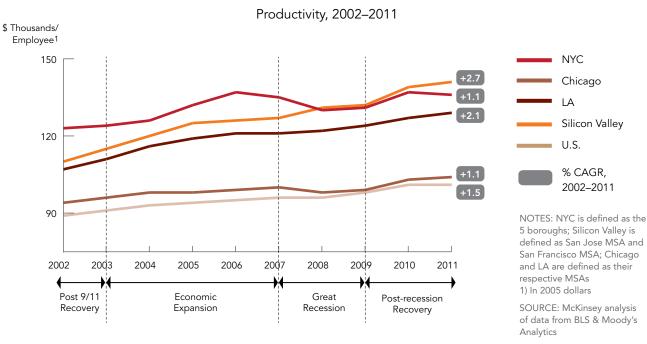
NYC Population Change, 2002–2012



NOTE: Sample error is less than 1.2% in each year

SOURCE: McKinsey analysis of data from the U.S. Census Bureau & Moody's Analytics

EXHIBIT 3.2: NYC's Productivity Growth Has Been Outpaced by Peer Cities & Lagged the U.S.



LAGGING POPULATION AND PRODUCTIVITY GROWTH

Economic growth is highly dependent on both workforce growth and increased productivity. Workforce growth has been handicapped by slow population growth, which was just 2.1% over the past decade compared to 9.4% between 1990 and 2000.⁷² Badly designed federal immigration and visa policies are largely responsible for reducing the inflow of skilled foreign talent into the city. Ironically, the Great Recession kept population numbers up by slowing a historic pattern of outward domestic migration, a phenomenon that is likely to reverse as the national economy recovers and job mobility increases.⁷³

The latest census estimate puts New York City's population at an all-time high of 8,336,697 in 2012.⁷⁴ Importantly, there were increases in all five boroughs, with the largest in Brooklyn. The question is whether this trend will continue as middle-income households struggle with affordability issues and federal immigration reform remains deadlocked.

In terms of productivity, defined as output per worker, the city has historically performed well because of the dominance of the highly productive financial services industry. But New York's overall rate of productivity growth has been slowed by the size of the city's healthcare, education and government sectors, which are the nation's least productive sectors. With annual growth of 1.1%, the city's productivity growth rate has fallen behind the national rate of 1.5% and peer cities such as Los Angeles (2.1%) and Silicon Valley (2.7%).⁷⁵ This matters because productivity growth is typically responsible for 65 to 70% of New York's overall GDP growth.⁷⁶

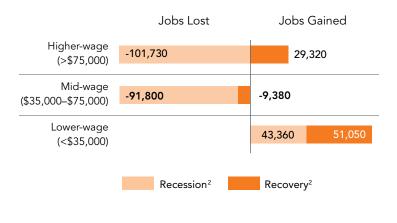
LOSS OF MIDDLE CLASS JOBS & HOUSEHOLDS

The city is experiencing a loss of middle-wage jobs and middle class households. This is partly due to the rising cost of living—driven by the cost of housing—and partly to advances in globalization and automation that allow companies to either eliminate or easily move business support and other mid-level functions to lower cost locations. The consequences of this trend, if it accelerates, could be the destabilization of neighborhoods, weakening of the city's labor pool, and further narrowing of the tax base.

During the past decade, the city lost middle-income jobs, while high and low-wage jobs increased. The biggest job increases were in predominantly low-skill, low-wage categories such as food, wholesale and retail trade, and healthcare. Since 2005, the occupation of Executive Administrative Assistant lost the most jobs (31,000 jobs lost at a median hourly wage of \$30) while the occupation of Personal Care Aide added the most jobs (38,000 at a median

EXHIBIT 3.3: Mid-wage Jobs Have Not Returned to Pre-recession Levels

Net Change in NYC Metro Occupational Employment¹



- Technology has displaced a range of mid-wage jobs, primarily those that were composed of routine tasks (e.g., administrative assistants)
- Globalization has also contributed to this trend, driving many mid-wage jobs that cannot be automated out of the country (e.g., manufacturing)
- Many low-wage industries are insulated from the impact of both technology and globalization because they require personal contact

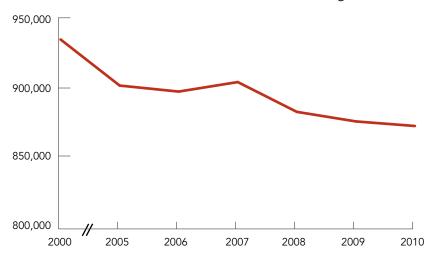
NOTES:

- 1) New York City Metropolitan Division
- 2) Recession is 2008 to 2010; recovery is 2010 to 2011

SOURCE: McKinsey analysis of data from BLS, Occupational Employment Statistics

EXHIBIT 3.4: Middle-income Households Have Decreased in NYC

Number of Households in Middle-income Segment¹

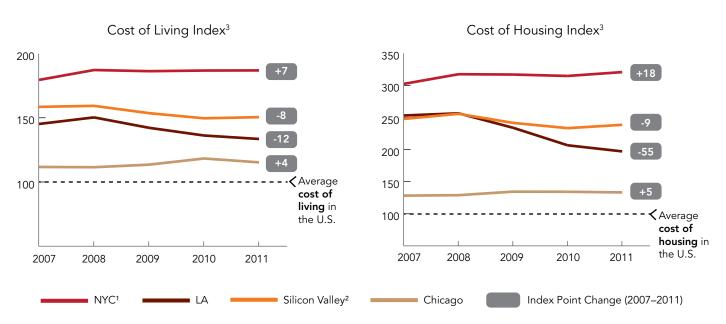


NOTE: 1) "Middle-income" is defined as households with incomes between

\$35,000 and \$75,000

SOURCE: McKinsey analysis of data from the U.S. Census Bureau, American Community Survey

EXHIBIT 3.5: NYC's Cost of Living Continues to Rise, Primarily Driven by the Cost of Housing



NOTES:

- 1) NYC includes Brooklyn, Manhattan & Queens; Bronx share of cost-burdened rental households (58% in 2011) is higher and risen the fastest than other NYC boroughs; Staten Island share of cost-burdened owner households (42% in 2011) have risen quickly as well (4.2% from 2005–2011)
- 2) Silicon Valley includes Oakland, San Francisco, and San Jose urban areas, except in 2009 when San Jose data was not available
- 3) Values index to 100 for U.S. average.

SOURCE: McKinsey analysis of data from ACCRA Cost of Living Index & Moody's Economy.com

hourly wage of \$10).⁷⁷ The gap between higher-wage occupations and lower-wage occupations also widened: the average median wage for higher-end occupations increased by 17% while medium- and low-wage occupations saw a decline in median wages of -4% and -6% respectively.⁷⁸

The middle class in New York City is statistically defined as the 60% of all residents earning between \$35,000 and \$75,000 a year.79 Almost half of this group cannot afford the median rent in the city, which was \$1,300 in 2010, based on the standard of 30% of gross income as the definition of what is affordable.80 With average home or apartment sales prices reaching \$775,000 in 2012, the middle class is also priced out of home ownership in the city.81 In 2011, housing made up 50% of the city's cost of living as compared to 34% in Chicago and 46% in Silicon Valley.82 Rental affordability in the city has declined dramatically in the past decade, with the number of cost-burdened households growing from 41% to nearly 50%.83

Unaffordable housing costs are a function of strong market demand, limited availability of

land for new development (only ~6% of the City's land was deemed "vacant" in 2010, much of it not suitable for development) ⁸⁴ and costs of residential construction that are twice the national average. ⁸⁵ The "premium" one pays to live in New York is rising at a time when lower cost cities—Austin, Miami, Shanghai, and Toronto—are competing fiercely for talent and mid-level jobs. ⁸⁶

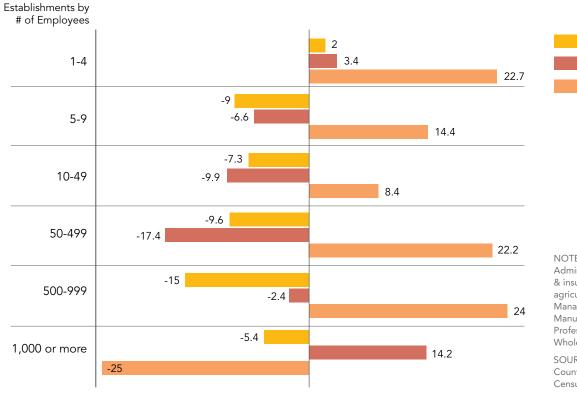
New York has the nation's largest subsidized housing inventory, with over 300,000 units and \$3.3 billion in annual federal aid, but are mostly restricted to low-income tenancy.⁸⁷ The majority of federal aid goes to the New York City Housing Authority (NYCHA) which is no longer the option for lower middle-income households that it once was

OBSTACLES TO BUSINESS & JOB GROWTH

New York City is the most expensive place in the country to build a business, with costs that are 1.5 times the national average.⁸⁸ Office rent and electricity costs, up to 30% of which are attributable to taxes, are twice the national

EXHIBIT 3.6: Small, Tradable Firms in NYC Have Not Scaled at the Same Rate as Competing Regions

% Change, 2003-2010



NOTE: Tradable sectors include Administrative services, Finance & insurance, Forestry & agriculture support, Information, Management of companies, Manufacturing, Mining, Professional & technical services, Wholesale trade

NYC

Austin

Silicon Valley

SOURCE: McKinsey analysis of County Business Patterns, U.S. Census Bureau average.⁸⁹ Because companies in a high-growth mode need all available resources to invest in people, New York is less attractive as a job expansion location than lower cost alternatives.

As a result, too few of the city's startup and small businesses are growing into major employers. Of the 220,000 businesses in the city, 195,000 or 88%, have fewer than 20 employees. 90 Between 2003 and 2010, New York City experienced a 9% increase in the number of firms with one to four employees, but no net increase in the number of firms with 50 or more employees. 91 Looking only at firms in tradable sectors (defined as those firms that can sell their goods and services beyond the five boroughs), the statistics are worse. The city has experienced significant losses in the number of tradable sector firms with five or more employees over the past decade. 92 This is a worrying trend, since the firms most likely to scale in the future are those that serve markets outside the city.

According to a recent report from the Milken Institute, America's most successful cities in 2012 were characterized by expansion in the manufacturing (tradable goods) sector. The Brooklyn Navy Yard stands out as the city's manufacturing success story. The City launched a short-lived Mayor's Office of Industrial and Manufacturing Businesses and several Industrial Business Zones (IBZs), but the number of manufacturing jobs has declined by 47% over the past decade. Lead to the same of the successful of the same of the s

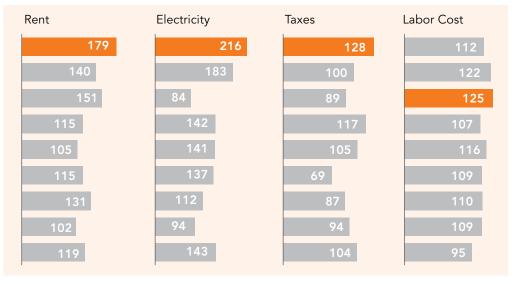
space available in the City-owned Brooklyn Army Terminal and other sites, but while this has raised some revenues for the city it has not significantly affected job growth. The city's cost structure makes it highly unlikely that traditional manufacturing will occupy more than a small niche in the economy, but one that is an important source of opportunity for entrepreneurs, artisans and semi-skilled workers. New, technology-enabled manufacturing, on the other hand, has potential to grow but will require access to support services and low cost space that does not exist today in sufficient quantity to support a cluster.

In a 2012 Kauffman Foundation survey of 6,000 small business owners nationwide. New York City was ranked among the least friendly places to start a business. 95 The business community is broadly dissatisfied with the city and state's punitive regulatory and legal environment that adds to direct costs as well as litigation risk. In 2010, the Administration and City Council launched the New Business Acceleration Team (NBAT), an initiative that has helped over 1,000 small food and beverage businesses run the hoops of opening a business in the city. This initiative has shaved months off of the time for getting new business approvals, but its target is too narrow for meaningful economic impact.96 More recently, the Administration has worked to get permits and applications online for easier processing, but the city remains a very difficult place for small businesses to navigate.

EXHIBIT 3.7: NYC Cost of Doing Business is the Highest in the Country

Cost of Doing Business Index¹





NOTES:

- 1) U.S. Average: 100; All data at the MSA level, 2009
- 2) Boston includes Boston and Cambridge
- 3) NJ corridor includes Trenton, Newark and Edison

SOURCE: McKinsey analysis of data from Moody's Economy.com

STRUCTURAL BUDGET DEFICIT

By 2015, the next mayor will have to deal with a large and growing structural budget deficit. The \$11 billion surplus that was accumulated during the past decade will be exhausted and the shortfall will be at least \$2.4 billion.97 Between FY2013 and FY2017, City-funded expenditures are projected to grow at an annualized rate of 4.5%, against a 4% annual increase in city tax revenues.98 There will likely be losses in federal aid, which represents about 18% of City fund expenditures in fiscal year 2013, including both federal stimulus funding and aid for Superstorm Sandy-related damages. Federal categorical grants will decrease to \$6.5 billion in fiscal year 2014, and are projected to continue to decrease slightly over the next four years.99

On the expenditure side, the City's public employee union contracts have expired and there are worker expectations of a retroactive pay increase that could cost the city an additional \$4 to \$8 billion in 2014. 100 The City payroll is projected to decline between 2013 and 2017 by 1.5%, but payroll will still comprise 29% of the budget in 2017. 101 This figure does not include health and pension benefits, which are projected to be 20% of total City expenditures by 2017 if no adjustments are made. 102

Solving the budget crisis will be particularly difficult because New York City is, to a large extent, a captive of state government, with limited control over its revenue or expenditure budget. Any reasonable resolution of the structural deficit will depend on cooperation from the state with respect to increasing city government's flexibility to manage its budget and the terms of its pensions, procurement and civil service requirements.

EXHIBIT 3.8: NYC's Budget Faces Growing Out-year Gaps

EXPENDITURES	FY2013 \$ Millions	FY2015 \$ Millions
Salaries & Wages	22,031	21,902
Pensions	8,062	8,203
Active & Retiree Health Insurance*	5,186	6,047
Other Fringe	3,314	3,353
Medical Assistance	6,314	6,447
Public Assistance	1,274	1,273
Debt Service**	6,010	7,183
Other OTPS	22,305	21,702
TOTAL	74,496	76,110
REVENUES	FY2013 \$ Millions	FY2015 \$ Millions
Property Taxes	18,440	20,176
Personal Income Taxes	8,488	9,030
Sales Tax	6,061	6,594
Business Taxes	5,617	5,973
Other Taxes	5,465	5,751
Miscellaneous Revenues	6,586	6,758
Federal Grants	8,655	6,361
State Grants	11,301	11,685
Other Categorical Grants & Aid	966	892
Net Surplus & Interfund Revenues***	1,917	517
Retiree Health Benefits Trust Fund	1,000	-
TOTAL	74,496	73,737
REMAINING GAP	0	-2,373

NOTES:

- * For FY2013, includes \$1 billion drawdown from the RHBTF
- ** Adjusted for the Impact of Prepayments
- *** Only FY2013 includes a net surplus of \$1.346 billion

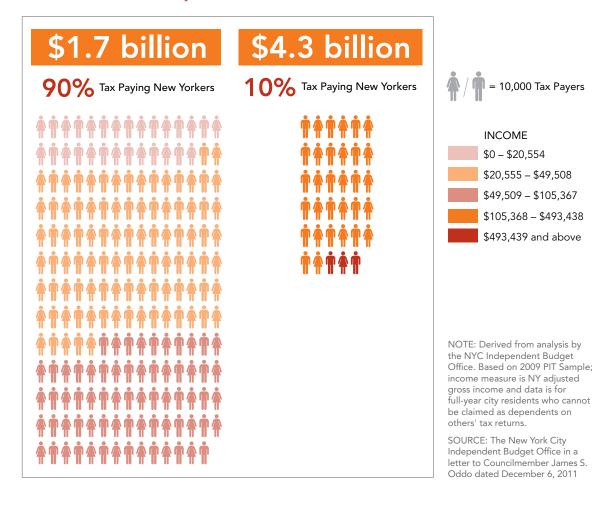
SOURCE: Citizens Budget Commission, based on January 2013 Financial Plan; includes intra-city revenues



The city's tax base is overly dependent on a relatively small number of high earners who tend to be highly mobile people. Only 34,598 tax filers who earn over \$493,439 represent 1% of all tax filers and account for 43% of the city's total income tax revenues. ¹⁰³ In 2013, those New York City tax filers earning over \$1 million who are subject to the state's income tax surcharge and the NYC Unincorporated Business Tax will

see their combined effective marginal tax rate rise from 48% to 54% of earnings. Federal caps on deductions, if enacted, would likely increase this burden to at least 60%. States like Texas, Florida and Utah are aggressively luring these high earners away from New York. The business community sees no constructive options for raising city or state income tax revenues to close the budget deficit.

EXHIBIT 3.9: NYC's Personal Income Tax Collections Rely on Too Few for Too Much



EDUCATION IS NOT KEEPING UP WITH NEW ECONOMY DEMANDS

New York City employers in high-growth sectors are increasingly experiencing a shortage of qualified candidates for available jobs. Postrecession levels and duration of unemployment appears to reflect a skills gap in the U.S. labor market. CUNY's Labor Market Information Service estimated nearly 190,000 job openings in New York City were posted online in January 2013, the highest volume since 2009.¹⁰⁴ Job openings were concentrated in the professional, scientific and technical services sector (30% of ads) and the finance and insurance sector (with 22% of ads). 105 Among major occupation groups, the three with the highest demand were management (62,000 ads), computer and mathematical (54,500 ads), and sales and related services (50,000 ads).¹⁰⁶ In the absence of sufficient qualified local job candidates, employers will increasingly locate support functions outside of the city.

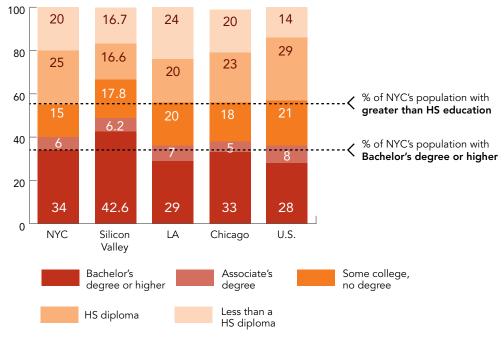
Despite gains in graduation rates and other education accomplishments, the performance of the city's education system continues to disappoint employers. In 2012, only 28.6% of



the city's public high school graduates were deemed ready for higher education or careers. 107 Nearly 80% of admissions to CUNY's community colleges from the city system required remedial work in math, reading, or writing. 108 The demands of remediation have left CUNY with limited resources to invest in career-oriented programs, equipment, student internships and professional faculty development that are necessary to produce a predictable pipeline of the excellent job candidates that employers need.

EXHIBIT 3.10: NYC Lags its Peers on Measures of Educational Attainment

Population Age 25 and Over by Educational Attainment %, 2011



SOURCE: McKinsey analysis of data from U.S. Census Bureau, 2010 American Community Survey

The three-year average graduation rate for CUNY's six community colleges is only 13.1%, slightly lower than the national average. ¹⁰⁹ CUNY has demonstrated the capacity to bring three-year graduation rates up to 55% through an accelerated study program, but this program can currently accommodate only 1,150 of CUNY's 96,500 degree-credit community college students. ¹¹⁰ CUNY plans to expand this program to 4,000 students by 2014. ¹¹¹

Students attending New York City institutions, public and private, are also not focused on subjects that are most relevant to opportunities in the job market. In 2011, colleges and universities in the city awarded only 13,000 bachelor and graduate degrees in Science, Technology, Engineering or Math (STEM), versus 26,000 in the humanities. ¹¹² The average STEM degree attainment for innovation center cities (Austin,

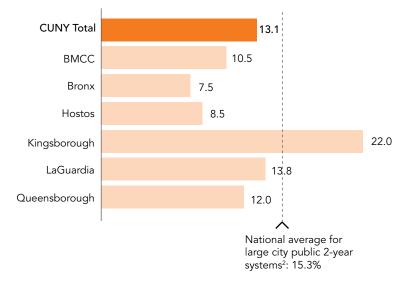
Boston, San Jose, San Francisco and Seattle) in 2011 was 16% of all degrees vs. New York City's 11%. San Jose is the top performer with 24% of total degrees being STEM degrees.¹¹³

INFRASTRUCTURE MODERNIZATION & MAINTENANCE

Aggressive investment in major capital projects to upgrade the city's aging infrastructure has pushed City debt to more than \$100 billion.¹¹⁴ Outstanding debt has increased by 86% since 2002, partly to catch up with historic underinvestment in infrastructure; and, debt service is forecast to rise by 28% over the next five years to \$7.8 billion in annual expenditures.¹¹⁵

EXHIBIT 3.11: CUNY's Community College 3-year Graduation Rates are Below National Average

CUNY 3-year Graduation Rate



NOTES:

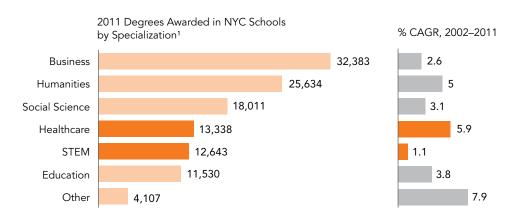
- 1) CUNY community college 3-year graduation rates are for the Fall 2004 Cohort.
- 2) Large city is defined as a central city with a population greater than 250,000.

SOURCE: CUNY; Integrated Postsecondary Education Data System Graduate Rate Survey, 2011–2012 & the National Center for Education Statistics (NCES)



Students attending New York City institutions, public and private, are not focused on subjects that are most relevant to opportunities in the job market.

EXHIBIT 3.12: The Number of Degrees Awarded in High-demand Fields such as Healthcare and STEM is Low Relative to Other Fields of Study



NOTE: 1) Data includes all completed post-secondary degrees

SOURCE: McKinsey analysis of data from the National Center for Education Statistics

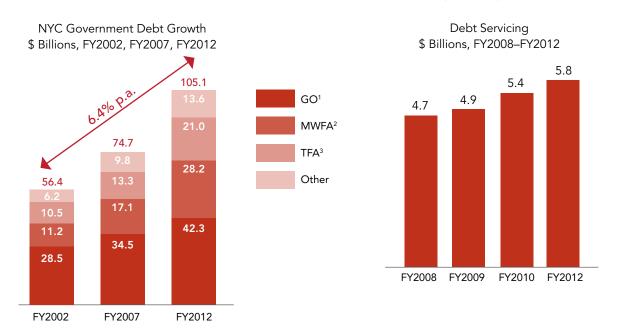
Debt service is a key driver of the out-year budget deficits. The Office of Management and Budget estimates that \$6.4 billion of additional capital work is needed just to bring essential city infrastructure assets to a state of good repair (equal to 45% of the City's capital commitment plan for the current fiscal year). This is exclusive of the transit system and the public housing stock.

Additional capital needs for the coming decade will require significant upgrades to deal with rising sea levels and other effects of climate change; completion of redevelopment in areas like Willets Point, Jamaica Center, North Shore of Staten Island, Long Island City and Greenpoint-

Williamsburg; and expansion of renewal into areas such as East New York, Red Hook, Sunset Park, the South Bronx and Astoria.

Two particular infrastructure priorities for the business community are airports and broadband connectivity. The region's airports are responsible for nearly half a million jobs and more than \$60 billion in annual economic activity, 117 yet they have been underinvested when it comes to essential capital improvements. LaGuardia, JFK and Newark were ranked the 1st, 4th and 5th worst airports in the nation, respectively, by *Travel and Leisure* magazine citing dilapidated buildings, cleanliness, and substandard Wi-Fi signals. 118

EXHIBIT 3.13: High Debt Service Has Been Driven by Capital Expansion



NOTES:

- 1) General Obligation bonds (GO)
- 2) Municipal Water Finance Authority bonds (MWFA)
- 3) Transitional Finance and Authority bonds (TFA)

SOURCE: Citizens Budget Commission & NYC Independent Budget Office analyses

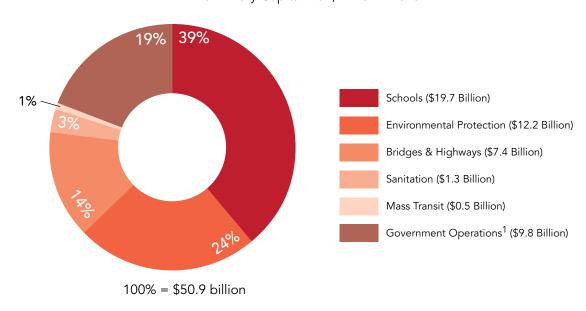
Adequate "new economy" infrastructure is a pre-condition for continued growth of the city's tech sector. A City partnership with Google to install a free wireless network in Chelsea and the ConnectNYC Fiber Challenge to bring wireless services to several underserved, low-income communities are only a start to what must be a much larger undertaking.¹¹⁹ Throughout the city, there is a need to upgrade wireless services and increase redundancy, while keeping costs as low as possible. Established and new service providers require access to public property and easements in order to install the systems required to insure that the city, and its transit system, remain competitive.

INCREASING GLOBAL COMPETITION

The Partnership for New York City-PwC 2012 Cities of Opportunity report identified new competitive pressures that will result from the increased economic clout of developing nations, as well as shifting consumption and lifestyle preferences that allow more cities to compete for talent and businesses. The global shift of populations from rural areas to urban centers in the developing world is creating unprecedented opportunity in 440 emerging market cities that are expected to generate almost half of global GDP growth by 2025. 120 New York will have to up its game to maintain its status in a new world economy.

EXHIBIT 3.14: Necessary Infrastructure Maintenance Investments in NYC

Preliminary Capital Plan, FY2014-2023



NOTE: 1) Includes administration of Justice, Housing & development, technology, parks, public buildings, health & hospitals, fire, culturals and libraries, social services

SOURCE: New York City Preliminary Ten-Year Capital Strategy, Fiscal Years 2014–2023





To remain the world's leading city of opportunity for business and residents, New York must maintain a solid rate of economic growth. To some extent, the pace of growth will be determined by macroeconomic forces and federal policies over which municipal government has little or no control. In partnership with the business community, organized labor and educational institutions, however, local government can anticipate and leverage market forces and apply municipal resources in ways that work to the city's advantage and sharpen its competitive edge.

This will require the City to identify and support those industries and employers that can generate new jobs and those educational institutions that are best preparing the students who aspire to them. It will also require keeping the city's "livability quotient" high by maintaining quality municipal infrastructure and services in the face of severe fiscal constraints.



The NYC Jobs Blueprint suggests benchmarks that the next Mayor could use to pursue reasonable aspirations for growth and opportunity in five key areas:

- More & Better Jobs
- Better Educated & Skilled Workers
- Greater Connectivity & Accessibility
- Safe & Affordable Living Environment
- Efficient, Disciplined & Well-Run City Government

The Blueprint also suggests the creation of organizational structures for advancing the opportunity agenda, reflecting the need for more robust public-private and business-labor partnerships.



Measures of Success: What the City Must Strive to Achieve by 2020

Real GDP Growth

3.1%

% CAGR per year since the recession (2009-2011), up from 1.7% per year over the decade (2002-2011)

RECENT HISTORICAL TREND

3.4%

MODEST

3.8%

AMBITIOUS

SUPPORTING RATIONALE

International peer cities (Shanghai, Singapore, Hong Kong, London, Toronto, Sydney, Paris and Berlin) have grown real GDP at 3.4% per year over the past decade (2002-2011), and have grown at 4.3% since the Recession (2009-2011); 3.8% is roughly the mid-point of these growth rates.

Productivity Growth

1.1%

% CAGR from 2002-2011

RECENT HISTORICAL TREND

2.7% 3.0%

MODEST

AMBITIOUS

SUPPORTING RATIONALE

The "modest" aspiration matches Silicon Valley's productivity growth of 2.7% over the past decade (2002-2011); 3.0% is the productivity growth necessary to reach real GDP growth of 3.8% while maintaining employment growth relatively in line with historical norms (0.8% per year would be needed; New York City had 0.6% per year employment growth from 2002-2011).

Middle-wage Job Creation

Jobs Target

-2.3%

% CAGR from 2008-

2011, 101,000 jobs

MODEST (4.3%)

Jobs Target

+61,000 +101,000

AMBITIOUS (7.2%)

SUPPORTING RATIONALE

61,000 jobs would restore the number of middle-wage jobs to 2005 levels, 101,000 jobs would restore to the peak of middle-wage jobs in 2008.

Unemployment Reduction

RECENT HISTORICAL TREND

9.5%

as of January 2013 RECENT HISTORICAL TREND 4.6%

MODEST

4.2%

AMBITIOUS

SUPPORTING RATIONALE

4.6% was the low during the last business cycle (12/07-6/09), both for New York City and for the U.S. as a whole; 4.2% was Silicon Valley's low during the last business cycle (the lowest among peer U.S. cities).



More & Better Jobs

Economic growth and accelerated job creation in the decade ahead will depend on the ability of startups and middle market firms to reach bigger scale, particularly those in technology and other "tradable" sectors that export goods and services to markets beyond the five boroughs. It will also depend on increased productivity growth in the healthcare, education and government sectors and, finally, on stabilizing legacy industries that anchor the city economy. The following are proposals for how the next Mayor could pursue these objectives in order to achieve benchmark aspirations for real GDP growth, productivity growth, middle-wage job creation, and reduction in unemployment.

Build Urban "Tech Campus" Developments in Every Borough

New York City offers no urban version of the West Coast tech campus environments that innovators and millennials find compelling. Cornell-Technion's campus on Roosevelt Island is designed with this atmosphere in mind, but this will only accommodate their faculty and affiliates—a small fraction of the demand that will accompany growth of the city's tech sector. With the expansion of the Tech Triangle surrounding Metrotech and NYU/Poly's CUSP, Downtown Brooklyn is a likely place to foster a live-work campus environment as are the Sunset Park and Long Island City waterfronts, Staten Island's North Shore and the Port Morris and Eastchester sections of the Bronx.

Opportunities for tech campuses include underutilized properties that require adaptive reuse—such as obsolete hospitals, armories, and Class B office and manufacturing space. The Urban Tech Campus would include vertical

live-work communities and "flex" work space for the growing creative, tech, health and advanced manufacturing sectors. The concept of inclusionary zoning, that has helped stimulate private development of affordable housing, should be expanded to incentivize development of commercial and industrial space in mixed use zones that is affordable to growing companies.

The Partnership Fund is prepared to invest \$20 million in the commercial component of a campus for entrepreneurs and tech startups. A good model is Las Vegas, where Zappos is leading development of a campus on the grounds of the old City Hall. 121 The project will be anchored by the Zappos' company headquarters and will include work-life integration with housing, education, and technology incubation. These developments will need to be long-term commitments, but an initial project would reinforce the city's brand as a center of technology and innovation.

Replace Non-Strategic Economic Development Programs with Jobs Tax Credits

For the state and city to compete effectively to attract job creators, there must be an overhaul of obsolete economic development incentives, most of which were created long ago by state legislation. The City currently offers no discretionary incentives that encourage creation of middle-income jobs, such as New York State's Excelsior Program. Instead, the City administers tax and bond financing incentives that are poorly targeted, have little multiplier value in the economy, and are not sufficiently robust to make New York competitive in high-growth sectors. To accelerate business expansion and middle-income job creation, the city needs a new Jobs Tax Credit, similar to Excelsior, where incentives are tied to creation of high quality

jobs, rather than geography, and limited to tradable sectors that advance the city's goals for economic growth. This will require legislation by State government to curtail or redirect existing programs and authorize new ones.

Reinforce the Financial Services Sector

The financial services sector accounts for 13.8% of private sector jobs in the city, but with average salaries of \$213,000 it represents 35% of the city's total private sector payroll. 122 It is essential to achieve stability or modest growth in financial services jobs over the next decade. This can be accomplished through retention of current firms, attraction of new firms from Europe and the developing world, and growth in financial technology businesses. It will require a proactive marketing program and supportive business, regulatory and tax environment in the city and state. The declining business climate and escalating regulatory pressures in Europe will cause many European-based firms to relocate

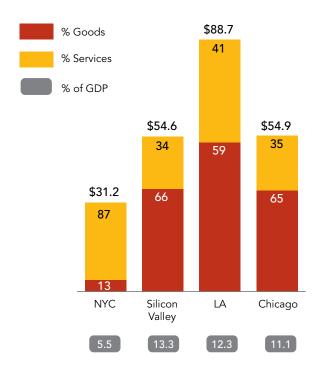
operations in the next decade. New York is the most likely beneficiary of these relocations, unless the regulatory and tax environment is too harsh, in which case Asia's accelerated dominance of global finance is almost assured.

Accelerate Sector Diversity

Traditional sectors (finance, construction, government, healthcare, professional services, education, retail and food) make up 66% of the local economy, while emerging sectors contribute just 17%. ¹²³ In the last decade, emerging sectors increased their share of the city's GDP by almost 3%, so a goal of reaching 20% of GDP in the next decade is in line with current trends. ¹²⁴ Technological transformation of legacy industries such as financial technology, health information technology, and big data applied to marketing and advertising, is driving diversification which the city can support through marketing, promotional and programming activities.

EXHIBIT 4.1: NYC Has a Lower International Export Intensity than its Peers

International Exports of Goods and Services \$ Billions, 2010



- All other cities have roughly double the level of NYC's export intensity
- However, NYC SMEs¹ perform well both internationally and domestically
- In New York State SMEs account for 47.6% of all exports (2005)
- ~34% of all food manufactured in NYC is sold to markets outside the five boroughs and is predominantly higher-value specialty foods (e.g., chocolate, ethnic foods, spices and gourmet jam)
- Promoting international exports can be expensive (e.g., representatives in international markets) but was the major source of growth during the past few years as domestic markets continue to be sluggish

NOTES:

MSA level data

1) Small and Medium-Sized Enterprises (SMEs)

SOURCE: McKinsey analysis of data from Brookings; U.S. Census Bureau; New York Industrial Retention Network and Fiscal Policy Institute; Small and Medium-Sized Enterprises and the Global Economy, edited by Gerald Susman

Expand Export Intensity

The city had \$31.2 billion in international exports in 2010, representing only 5.5% of its GDP.¹²⁵ Doubling exports, so that they represent at least 10% of GDP, would add up to 162,000 new jobs in tradable sectors in the next decade.¹²⁶ Silicon Valley and Chicago had international exports nearly double New York's in 2010 (\$54.6 billion and \$54.9 billion, respectively), while Los Angeles' exports were nearly triple (\$88.7 billion).¹²⁷

The Obama Administration set a five-year goal of doubling exports and is on track to achieve it, with the help of direct loans, credit guarantees, and credit insurance from the Export-Import Bank. Exports accounted for 50% of U.S. growth since 2009. Per New York City could do the same, gaining up to 5,400 jobs for every \$1 billion in additional export activity. Creater Portland has succeeded in growing their exports by 109.3% from 2003 to 2010. Collaboration between government, industry and universities, under a Brookings pilot program, has put Portland on track to double exports from \$21 billion to \$42 billion, adding 113,000 jobs in the next five years.

Current sources of export advice and financing are aimed mostly at large, established businesses. New York should establish an Export Exchange to assist small and middle market businesses. New York's international corporations, banks and financial firms could be enlisted to introduce their local supply chains to international markets. The foreign international offices of NYC & Company might add resources/capabilities to assist with the promotion and facilitation of selling New York City produced goods in new markets. SBS could coordinate outreach and intergovernmental assistance to this effort.

Encourage New Manufacturing & Artisan Enterprise

A successful formula for re-energizing the city's manufacturing sector has come from highly focused, public-private partnerships that provide affordable space and support services. The most notable examples are the city-owned Brooklyn Navy Yard and the nonprofit Greenpoint Manufacturing and Design Center (GMDC). The Navy Yard currently houses 330 tenants that provide nearly 6,000 jobs—up from 3,600 workers in 2001.¹³³ The GMDC has converted six obsolete manufacturing buildings into collective production centers for more than 100 small and artisanal businesses with 775 employees. 134 With public, private and philanthropic funding, both entities have created successful models for providing affordable space and shared services that support specialty production in "tradable" sectors.

The impasse over rezoning of the Midtown Garment District illustrates how advocates of traditional manufacturing have misdirected their attention to hanging on to jobs that no longer make sense in the city, as opposed to promoting advanced manufacturing and the intersection of design and production (such as 3-D printing), where the city has a clear competitive advantage





and an industry cluster could grow. The New Lab design center planned for the Brooklyn Navy Yard is the kind of facility that could anchor an advanced manufacturing cluster, but this will require significant public investment before it yields economic returns for the city in terms of new jobs and tax revenues. Today, public resources are being expended to keep alive businesses that do not represent the future of manufacturing in the city. Obsolete economic development tools must be updated and resources re-directed into creating modern manufacturing clusters in order to support jobs growth in tradable, export sectors.

Promote Tech Startups

Silicon Valley is the center of technology innovation, but future growth will be in the application of technologies to financial services, health, retail and other industries where New York City enjoys a huge competitive advantage. The number of venture capital-backed startups in the New York City metro area grew to 247 in 2011, up from 205 in 2001.¹³⁵ Continued support for tech startups, in combination with investments like the Cornell-Technion campus, could enable New York to significantly increase its startup activity.

Aside from mentoring, marketing and promotional programs that continue to engage the tech sector, growth in startups will require increasing venture capital investment activity which totaled \$2.1 billion in 2011, growing at a rate of 2.8% from 2001 to 2011.¹³⁶ New York saw the largest increase over the past decade, even compared with Silicon Valley, and should capitalize on this trend.¹³⁷ The Partnership for New York City has encouraged the state to create an Angel Investor tax credit as an indication of the commitment to incentivize investment in startups.

For the life sciences, there is a need to develop affordable lab space, which is almost nonexistent in the city. EDC has attempted to develop lab space in the Brooklyn Army Terminal (BioBAT), but so far only a nonprofit lab has occupied that location and some 400,000 square feet are unimproved.¹³⁸ Most scientists who are starting companies want to be close to their research and teaching locations, along the lines of what Columbia Medical School developed at the Audubon, which was the city's first bioscience incubator. The City should work with the medical research institutions to identify additional space and secure public and private support to make it affordable.

EXHIBIT 4.2: NYC Startup Growth Outpaces All Competitor Cities

Number of Venture Capital-backed Startups, 2011



NOTE: MSA level data

SOURCE: McKinsev analysis of data from PwC MoneyTree report

Champion Diversity in the Tech Sector

Blacks and Latinos are 28% of the population of the United States but account for only 7% of the STEM workforce. 139 Only 4.6% of all undergraduate computer science degrees in the U.S. went to Blacks in 2011. 140

New York could differentiate itself as the global leader in diversifying professional employment and entrepreneurial leadership in the tech industries by working with employers and educational institutions to promote efforts to recruit and mentor minority students for the STEM educational track, offering internships for work experience, and developing a program to help place minorities in the city's tech sector jobs.

Establish Industry Partnerships for Economic Development

The city's economic development functions should be strengthened by creating a network of four or five industry-supported entities that mirror NYC & Company's structure and, hopefully, could replicate its success in boosting the city's tourism industry. These industry groups would have top professional management and a board drawn

from industry, academia and labor. Industry-specific entities would be responsible for creating and implementing end to end solutions for job creation and economic output in key tradable sectors, including financial services, technology, creative industries (media, fashion, the arts), and manufacturing. These new entities would:

- Identify scalable companies and help them navigate New York City's regulatory and real estate worlds;
- Facilitate access to talent, capital and global markets;
- Work with trade associations and educational institutions to establish industry councils to tailor the city's education and workforce development system around industry job openings, advising on curriculum and credentialing requirements, arranging apprenticeships and permanent placements and evaluating service providers; and
- Advise government on projected job needs, which would translate into priorities built into public funding for educational and training institutions.

EXHIBIT 4.3: NYC Has Seen Significant Growth in Venture Capital Funding of Startups

Total Amount Invested

\$ Millions, 2011 Seattle 491 Boston 2,778 Silicon Valley 701 Chicago 11,915 2,150 New York Los 927 **Angeles** Austin 642 302 Houston

Venture Capital Growth % CAGR 2001-2011 Silicon Valley Boston -3.7 New York +2.8 Los Angeles +0.9-3.3 Chicago Austin -5.2 Seattle -6.6 Houston -3.0

NOTE: MSA level data

SOURCE: McKinsey analysis of data from PwC MoneyTree report

EDC would provide "umbrella" coordination and various support services to the industry groups, while continuing its primary functions of managing economic development capital projects and contracts, property disposition and land use actions. EDC and SBS would also be responsible for data tracking, economic analysis and oversight of City incentive programs as well as outreach to minority and women owned business services.

For the manufacturing sector, where industry interests are particularly fragmented, the City should work with the Brooklyn Navy Yard Development Corporation and GMDC to establish a pan-manufacturing industry support organization that would have the capacity to promote this sector and to manage city-owned industrial properties and IBZs.

Create a Commercial Rent Tax Credit

New York City is unique in imposing a tax on commercial rents for any business tenant in Manhattan (south of 96th Street) that pays more than \$250,000 in annual rent.¹⁴¹ The commercial rent tax, a 6% tax on base rent (less certain discounts), is a powerful disincentive for companies to grow

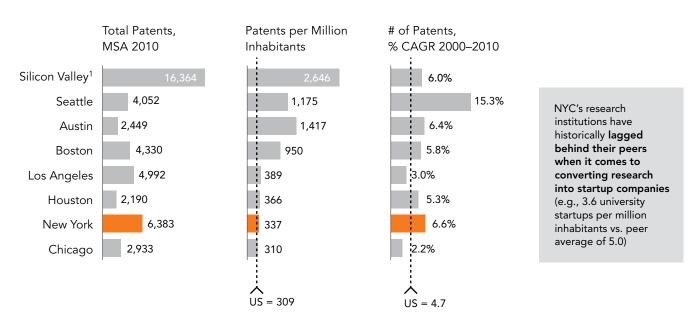
here. ¹⁴² It should be eliminated. Recognizing that this would represent revenue losses of half a billion dollars, an alternative/interim measure could be a credit against the tax for new companies that hit the rent threshold by virtue of expansion that creates new, middle-income jobs.

Establish a Resource Center for Job Creators

The City, working with the real estate brokerage and consulting community, should establish a gateway for companies that are seeking to locate in or scale up in the city. Services should include a shared listing of spaces that can meet the needs of growing companies as well as fast track on permitting, licenses and other government approvals. This center would connect job creators to sources of employee recruitment and training and other resources needed to grow a business locally.

It would provide a new source of information about the businesses that are seeking to grow and what they need from local government, generating data that could inform the City's planning, tax and zoning policies.

EXHIBIT 4.4: NYC Lags Most of its Peers in Research Commercialization



NOTE:

1) Data for San Francisco & San Jose MSAs

 ${\sf SOURCE: McKinsey\ analysis\ of\ U.S\ .} \ {\sf Patent\ and\ Trademark\ Office\ \&\ U.S.\ Census\ Bureau}$



Create a Permanent Innovation Advocacy Organization

New York City's key growth industries will only flourish if innovation remains at the forefront of the economic development agenda. Increased patent registration and commercialization of local discovery requires closer cooperation between government, industry and the city's academic and research institutions. Universities in New York must be encouraged to promote opportunities for commercialization. The NYC TechConnect Program, co-sponsored by the Partnership Fund and the New York City Council, has discovered a huge pent up demand among researchers and scientists for access to investors, business assistance and industry relationships.

A new 501(c)(3) organization should be formed to advocate for policies, programs and projects that promote the city's status as a global capital of innovation in every sector. This group will be comprised of leaders of business who are at the forefront of innovation and the heads of the city's most important academic and medical research institutions. It would organize an annual conference championing the city's latest breakthroughs, build a cross-sector network of innovators, produce policy reports, and develop an advocacy agenda for federal, state and city actions to support innovation and tech transfer.

New York City patent registrations, an indicator of leadership in the innovation economy, are low compared to the most innovative cities (behind Silicon Valley, Seattle, Austin, Boston, Los Angeles, and Houston). The rate of annual growth for the number of patents increased by 6.6% between 2000 and 2010—much lower than Seattle's 15.3% growth rate, but greater than the U.S. growth rate of 4.7%. 143 New York has the largest concentration of great academic and research institutions, most of which are undergoing a culture shift toward greater emphasis on

commercialization of discovery, rather than sale of patents. The Applied Science Initiative will accelerate this trend, but a permanent organization that focuses on innovation across the board is needed to keep moving New York forward in the knowledge economy.

Better Educated & Skilled Workers

In the next decade, secondary and higher educational institutions must focus on producing more graduates who are prepared for the 21st Century workplace. This is particularly true of public institutions whose primary responsibility is to assure New York City's public school graduates the opportunity to move up the economic ladder.

Through 2020, the city is projected to gain 284,000 jobs that require bachelor degrees or more, an additional 201,000 jobs that will require associate-level degrees or some college, and 72,000 additional jobs that will require a high school degree. He before the end of this decade, demand for employees with an associate degree or higher will increase by 21%. This suggests some targets that the public education system should strive to meet.

The New York business community has a great history of philanthropic and in-kind support for public education and career development, working directly with the public school system and through nonprofit organizations like New Visions, the National Academy Foundation, PENCIL and others. But these are fragmented interventions with limited systemic impact. With respect to CUNY and private universities, employer and industry engagement is even weaker and more scattered. There are models in California, Washington State, Germany, Switzerland and Australia, where centralized and systemic employer engagement with secondary and post-secondary education and work-study

experience has changed unemployment rates and filled labor market needs. The City and State have initiated efforts to reform career and technical education requirements in the public schools and community colleges, but this remains a nascent effort. It should be a top priority.

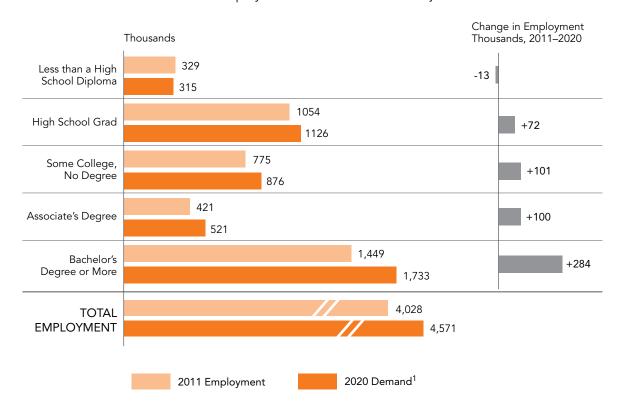
Launch NYC 2020 Jobs Challenge— A Partnership between Employers & Educators

Recognizing that post-secondary education is becoming a necessary credential for a middle-income job, the City has worked with CUNY to develop a 9–14 graduation and certification model, with an emphasis on work-based learning opportunities. The most prominent example is P-TECH, a partnership with IBM that was called out for replication by President Obama in his State of the Union message this year. But opportunities like P-TECH are available to only a small fraction of the city's student population. They must be expanded.

The city's employers have strong motivation to insure that graduates of New York City high schools and post-secondary degree programs are well prepared for the jobs of the 21st Century. The Partnership for New York City proposes creation of NYC 2020 Jobs Challenge, in which employers will commit to coordinated engagement in a city-wide career and technical education initiative that would result in significant reduction in unemployment and underemployment of New York City high school and college graduates through appropriate training and placement. The challenge would require that employers agree to specific goals for providing work experience through mentoring, internships and opportunities for employment, while the State, City and educators would agree to work with employers to reform curriculum, credentialing and certification processes and upgrade professional development of educators to match demands of the workplace. Corporate leadership and philanthropic support will be necessary, but the success of NYC 2020

EXHIBIT 4.5: 2020 Projection: Significant Increase in Demand for Workers with Higher Education

2011 Employment Demand and 2020 Projection



NOTE: Labor demand from Moody's base-job-growth scenario SOURCE: McKinsey analysis of data from BLS, Moody's Analytics & U.S. Department of Labor

EXHIBIT 4.6A: Projected Net Job Creation in NYC, 2011-2020

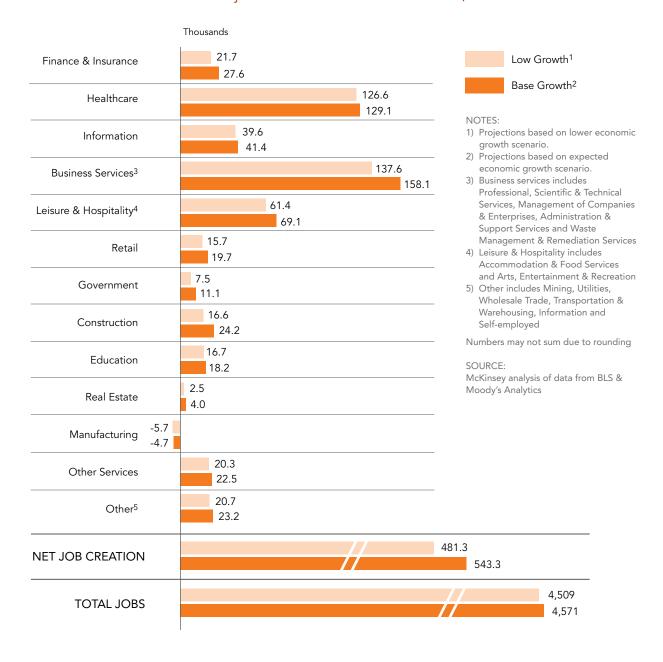
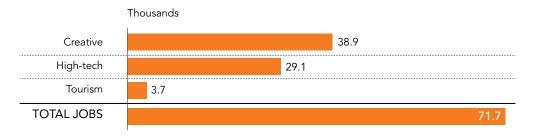


EXHIBIT 4.6B: Job Creation is Projected to Continue in NYC's New Economy and High-growth Sectors

Projected Net Job Creation in New York City, 2011–2020



NOTE: The creative, high-tech and tourism sectors were created through McKinsey's analysis of traditional industry sectors to show the share of jobs and impact on GDP by aggregating 4 digit NCAIS codes.

SOURCE:

McKinsey analysis of data from the BLS & Moody's Analytics



Jobs Challenge will depend on involving thousands of early stage and growing entrepreneurial companies in the tech sector and creative industries as a source of work experience and employment opportunities in the new economy.

Establish Outcome-Based Criteria for Education Funding

students to help prepare them for New Economy jobs.

Those localities which are most successful in competing for tech jobs have tied funding for public university systems to meeting employer demands for an adequate supply of wellprepared job candidates. The culture of New York City's public and private university systems, as well as the predisposition of the state Department of Education, must shift in the direction of placing greater value on technical and careeroriented education, industry partnerships, and job-related outcomes. Governor Cuomo has included incentives to promote these objectives in his 2013 budget. Funding and evaluation of educational institutions must be firmly tied to student outcomes, including job placement. Currently, the system is blind with respect to job placement and earnings of graduates because there is no access to the state's Wage Reporting System (WRS) data. Other states, including California and Florida, use WRS for systemic portfolio review and to guide public investment in education and workforce development, while protecting individual privacy. New York needs to do the same.

Educational institutions must also have up-to-date information about labor market needs, which are changing rapidly as a result of technology and other factors, and take these into account with respect to curricula and professional development. The city needs a market-based skills database

with up-to-date information about the size, nature and skills requirements of the relevant job market. Developing this system should be a priority project of the City, working with industry.

Coordinate Education, Workforce Development & Job Placement Functions under a Chief Talent Officer

The Mayor needs the ability to coordinate management of the city's education, workforce development and job placement systems, in order to align their activities with the Administration's strategic vision and the demands of the workplace. The City currently runs a \$22 billion education system¹⁴⁶ and a \$1.4 billion mélange of workforce development programs including job placement programs.¹⁴⁷ It spends roughly \$300 million annually in support of CUNY programs. 148 These initiatives are carried out by a variety of public agencies and contracts with hundreds of nonprofit and private agencies and institutions. With respect to job preparation and placement, these entities are competing to build one-off relationships with employers in order to place clients, reach government targets and maximize revenues. The result is an inefficient and wasteful deployment of resources.

Within the City, there should be a "Chief Talent Officer"—a Mayoral appointee—who is responsible for workforce and career development functions, including those conducted by the Department of Education, post-secondary institutions, contractors and industry groups. 149 At the very least, the Chief Talent Officer would be responsible for understanding the talent needs of the changing economy through continuous interaction with the private sector and ensure that these needs are communicated to the City's workforce

development agencies and educational institutions so that programs are immediately tailored in response. The Chief Talent Officer would also be responsible for developing a single strategic plan that guides allocation of Federal, State, City and private funds, evaluation of service providers, industry relationships and job placement.

The Bloomberg Administration has taken important steps in this direction with the creation of Workforce1 Centers run by SBS and the Office of Human Capital Development. The functions of both need to be elevated, institutionalized and scaled. This does not mean creating a new bureaucracy, but rather consolidating authority and funding that is currently spread across far too many public agencies and service providers. Only a centrally managed system can develop and constantly update a city-wide workforce education and placement plan, build significant job pipelines with employers, and close the gap between job skills requirements and the city's unemployed and underemployed.

This Blueprint proposes that the city and state should overhaul New York's workforce development system.

Greater Connectivity & Accessibility

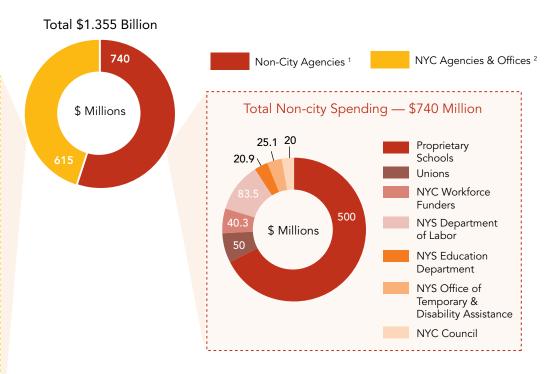
Global cities are only as great as their basic infrastructure, which must be up-to-date, well maintained and resilient. Superstorm Sandy revealed new vulnerabilities in the power, transit and communications systems. Experts are reviewing these conditions and will produce proposals that the city must move quickly to evaluate and, where appropriate, implement. These will add to a long list of city infrastructure modernization and expansion needs, from leaking water tunnels and solid waste systems to digital connectivity.

Of particular concern is the transportation system, largely managed by state-controlled agencies (MTA, Port Authority of New York & New Jersey (PANYNJ) and the State Department of Transportation). During the last decade, spending of capi-

EXHIBIT 4.7: Workforce Development Extends Across Multiple Agencies and Funding Streams



- NYC Department of Aging
- City University of New York
- NYC Department of Correction
- NYC Economic Development Corporation
- NYC Department of Education
- NYC Department of Health & Mental Hygiene
- NYC Housing Authority
- NYC Human Resources Administration
- NYC Department of Parks & Recreation
- NYC Department of Small Business Services
- NYC Department of Youth & Community Development
- NYC Center for Economic Opportunity
- Mayor's Office of Adult Education
- Mayor's Office of Immigrant Affairs
- NYC Workforce Investment Board



1) \$740 million = Funded and/or administered by federal, state or private entities 2) \$615 million = Funded and/or administered by city agencies & offices

NOTE: Derived from Public Consulting Group, City of New York Workforce Development Mapping Initiative, January 2011 to include public and non-public sources omitted from the study.

SOURCE: The State of the New York City Workforce System, Fiscal Year 2010, The City of New York.



tal dollars to build new mass transit infrastructure has increased, while investment in maintenance has taken secondary priority. The transit repair backlog of the MTA equates to approximately \$3.4 billion, of which 40% is currently unfunded.¹⁵⁰ The Second Avenue Subway and East Side Access under Grand Central Terminal are underway, but funding to complete these major projects is not in place. Similarly, there are needs for a new Hudson River tunnel and increased services to new employment centers throughout the region. Fare and toll increases and dedicated taxes have failed to close operating and capital budget shortfalls. The next Mayor should review the city's transportation priorities and be an advocate for exploring public-private partnerships that increase access to private capital and help reduce construction costs.

Pursue Universal & Redundant Connectivity

New York is one of the most highly competitive telecommunications markets in the country; however, legal and regulatory barriers make it difficult for service providers to build-out needed broadband and wireless infrastructure across the city. It is time to amend regulations that impede the rollout of broadband and wireless access in order to align with current technology specifications and future technological advances. The city's digital infrastructure lags its competitors, particularly in the boroughs where startups are looking for low cost space. Although median download speeds are higher than national averages, businesses cite frequent downtime and lack of redundancy as problems. 151 The City needs to work with providers to create

the right incentives for private investment, on an accelerated basis, in a universal, redundant and affordable digital infrastructure.

Advocate for Improved Airports

The airports serving the New York Metropolitan Region handle one-third of the nation's flights but are responsible for three-quarters of the nation's air travel delays, which cost the regional economy more than \$2.6 billion in annual losses. 152 This can be remedied with installation of modern satellite air traffic controls that would improve conditions for passengers, airlines and residents living under flight paths. International airports are a prime example of where publicprivate partnerships have been most successful in achieving economic solutions to major capital investment challenges. While airports are not a direct City responsibility, their condition and capacity are among the most important factors affecting the city's future growth.

The air cargo operations at JFK support 50,000 regional jobs, with \$3 billion in wages and \$8.6 billion in sales. 153 During the past 10 years, daily air cargo volume has declined by almost a third. 154 EDC and the PANYNJ have studied the situation and come up with recommendations to increase freight activity that include: a Cargo Village to provide better facilities for trucking operations and drivers; a commercial development zone providing incentives for tradeoriented activity; and improved airport access for large trailers. 155 Since 35 new jobs are created for every 1,000 tons of freight moved, these investments make sense as part of the strategy for building the city's tradable sectors. 156

Redesign the Transportation Network

As job growth expands in the outer boroughs and people move to new areas of the city, commuting patterns are changing and the Manhattan-centric routes of the traditional mass transit system are increasingly inadequate. The agencies that run transit systems are not necessarily responsive to specific requests for new services. The next Mayor should lead efforts to mobilize a regional commitment to reconfigure the system in response to changing demands and plans for future development. This should include cross-Hudson solutions, improved airport access, and regional freight movement.

Commute times in the city are some of the longest in the nation, averaging 52 to 69 minutes for public transit riders.¹⁵⁷ Public transportation commute times could be reduced by 30% by accelerating the implementation of 16 planned Bus Rapid Transit routes.¹⁵⁸ Commute

time translates into reduced productivity in government and the private sector. The city's first three, "capital light" Bus Rapid Transit routes have reduced average travel times by 20% in high traffic corridors. ¹⁵⁹ A second major contributor to commute times is traffic congestion which cost New Yorkers \$11.8 billion in 2011. ¹⁶⁰ It is time to resuscitate proposals for congestion pricing and bridge tolls to reduce congestion and create new revenue sources for mass transit.

The city needs to continue to focus on ferries, wherever the economics make sense. East River ferry ridership surpassed 1.7 million passengers in 2012, demonstrating the potential of this commute option, assuming adequate operating subsidies and intermodal connections. 161 In the wake of 9/11 and Sandy, ferries were the first mass transit option to be up and running and provided interim transportation for badly hit communities. While the operating cost is high on a per passenger basis, the capital expense of ferries is very low compared to any underground alternative. Whenever possible, ferry routes should be put in place in areas of the city lacking other public transit options, creating seamless connections between ferry landings and the MTA mass transit system.

Tap Private Sector Resources

State legislation dictates the ability of the City and its agencies to establish public-private partnerships or innovative design-build initiatives for financing and expediting public infrastructure projects. At least 34 states and Puerto Rico have laws that allow private investment in public projects on flexible terms. ¹⁶² New York City and State should organize a business-labor partnership to advocate for similar legislation and seek to put pension funds and private capital and expertise to work on the city's infrastructure challenges.

Safe & Affordable Living Environment

New York's "livability quotient" is high when it comes to safety, green space and other quality of life criteria. Building on the record of the Giuliani Administration, during the last decade there was another 31% reduction in major felony offenses and 19% reduction in non-major felony offenses. 163 The New York City Police Department (NYPD) needs to continue to have the resources and authority to continue these gains. After safety, the biggest "livability" challenge is rising housing costs. The city would need to shift more than 100,000 households into housing units affordable at their income level to restore historic, pre-recession affordability levels (+126,000

units) or to match the national average of cost burdened households (+142,000 units). ¹⁶⁴ This is a shift that cannot be accomplished solely through new construction, so a combination of solutions is required.

Optimize Existing Housing Resources

While housing costs are high, there are many New Yorkers who enjoy a great housing bargain, often for generations. There are tens of thousands of regulated and subsidized units where a single person or couple is hanging on to a large, family-sized apartment. This includes units in public housing, Mitchell-Lama housing, rentregulated units, tax-advantaged co-op and condo conversions as well as seniors in large homes who benefit from artificially low property tax assessments and abatements. These households are over-housed, effectively at the expense of other New Yorkers. The City and State need to dramatically improve enforcement, providing incentives to upgrade illegal units, subdivide large homes into rental units, and reform laws that provide a housing affordability advantage on a basis other than economic need and family size.

There are also large numbers of New Yorkers living in illegal, overcrowded units where they are paying too much for dangerous, substandard accommodations. The Pratt Center estimates more than 100,000 unofficial housing units in basements and cellars exist throughout the city, 35% of which can easily become legal with minor changes in codes and regulations.¹⁶⁵ Other cities have legalized Accessory Dwelling Units by establishing a process to bring them up to code. In New York, this would involve updates to zoning and habitability rules as well as making changes to the apartments themselves. At the same time, codes and zoning should be amended to encourage development of additional accessory units and work-live accommodations on existing properties that are currently underutilized.

Reduce Costs of Housing Construction

The city could optimize housing development and reduce costs by increasing floor area ratio (FAR) for residential development, reducing parking, setback and yard requirements, increasing inclusionary zoning bonuses and simplifying and expanding the allowable transfer of development rights. The Bloomberg Administration has launched a pilot development of micro-units that are smaller than New York City regulations currently allow—expected to measure 250 to 370 square feet. The city has approximately 1 million studios and one-bedroom units to accommodate some 1.8 million one- and two- person households. Housing demands in the

city are also changing. Only 16% of households are made up of "traditional" family units while 33% are single person households, a trend that will continue to grow. 167 The micro-units are an obvious and important housing option that the city should make legal.

Forest City Ratner recently negotiated a contract with the Building Trades and Construction Council of Greater New York to develop high rise modular housing at Atlantic Yards, possibly saving as much as 20% over conventional, union built high rise housing. 168 The fact that increasing numbers of projects are being developed on a nonunion basis should create an incentive for union contractors and labor leaders to work with the city and developers on cost-saving changes in work rules, approval processes and other requirements to reduce the cost of new affordable housing developments.

Time is money in construction, and the predevelopment, construction and post construction regulatory review and approval processes add significantly to construction cost. The next Mayor will need to revisit the laws, regulations and agency procedures that needlessly add to the cost and inefficiency of construction.



Prioritize Long-Term Planning & Sustainability

The Bloomberg Administration established the Office of Long Term Planning and Sustainability, with a citizen advisory council, to insure crossagency cooperation on achieving a greener, more energy efficient city. The experience with Superstorm Sandy drove home the importance of this office and will result in a new set of priorities to work through the municipal bureaucracy. Other actions that should be taken up by the next Administration include making certain green building code retrofits mandatory, in combination with scaling up the city's nonprofit Energy Efficiency Corporation to provide funding for the pilot stages of retrofit compliance.

Improve Services in High Crime Communities

There remain a handful of communities where the incidence of violent crime is significantly higher than in the rest of the city, particularly in and around New York City Housing Authority (NYCHA) buildings.¹⁶⁹ NYCHA released a resident survey in 2011 where more than three-quarters of respondents reported they were very or somewhat fearful of crime in their development and 30% reported that their fear of crime had increased over the past 12 months.¹⁷⁰ More than half (55%) of respondents reported that they do not leave their apartment due to fear of crime in their development.¹⁷¹ Installing more security cameras, adding strategic lighting and placing security guards in lobbies are a few approaches recommended by the NYPD that would reduce the number of violent and petty crimes.

At the same time, connecting youth in these communities to education and jobs must be a priority for the city's workforce development agenda. There are a variety of city, state and nonprofit initiatives and an expanded state tax credit attempting to address the issue of disconnected youth that should be consolidated. What is needed for impact, however, is a commitment by public funding agencies to coordinate funding and services directed to highly impacted communities, particularly in the face of federal and state budget cuts.

Efficient, Disciplined & Well-Run City Government

New York is a mega-city that presents a megamanagement challenge: a \$70 billion budget, 354,000 employees, 40 departments and hundreds of agencies, commissions and offices. 172 The Bloomberg Administration has taken important steps to put in place systems for data collection and performance reporting across all agencies that provide the foundation for solid management. Efforts are underway to improve and integrate the information technology systems of City departments, which is essential in order to achieve greater efficiency and improve fiscal and program management and procurement. This will, hopefully, result in an approach to technology infrastructure that will enable the next Mayor to effectively track performance and manage municipal government through a period of severely constrained resources.

New York City faces hard choices when it comes to future budget decisions. Success in addressing these issues will be far more likely if business and labor groups work together and with government to establish a shared understanding of the facts and possible options for achieving fiscal balance, including reduced expenditures, productivity increases and revenue growth.

The business community can bring expertise on investment choices and revenue sources, based on economic returns and risks. Labor can advise on what reforms of state civil service, public pension governance, and other laws and regulations can improve the efficiency and productivity of government. Business and labor can jointly help explore pension fund investment opportunities in public infrastructure and innovative financial instruments to attract private sector/philanthropic capital.

Eliminate the Structural Budget Deficit

The City will need to dramatically reduce expenditures and find new revenue streams in order to close the projected structural deficit. The business community does not see much room to raise taxes, so increased revenues will depend largely on economic growth.

The capital budget also must be brought under control, since rising debt service is a major contributor to operating expenses. The Citizens Budget Commission has proposed careful review of the projected capital budget to identify

potential savings or opportunities for private investment. Over the next five years, \$37 billion in capital spending is planned.¹⁷³ There is little transparency with respect to neither how capital budget priorities are identified nor cost benefit analysis to justify them.

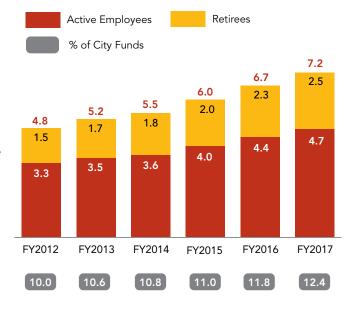
Public employee pensions and health benefits are absorbing resources the city needs to support essential services. The problem is most acute with current and retiree health insurance benefits, with expenditures of \$5.5 billion projected for 2014.¹⁷⁴ The City still pays 100% of health premiums for most of its current employees, their spouses and dependents, and for retirees (aside from elective prescription drug coverage). Renegotiation of these benefits must be a priority in the City's labor negotiations with more than one hundred public employee unions.¹⁷⁵

Recruit Strong, Tech-Savvy Managers

The key to the success in managing the complex enterprise that is New York City government is the quality of the line managers. The business community is prepared to work with the next administration to identify and recruit highly qualified managers, on both a staff and volunteer basis.

EXHIBIT 4.8: Health Benefits are a Growing Budget Burden

FY2012–2017 \$ Billions



SOURCES:

- Health Insurance: NYC Office of Management and Budget, November 2012 Financial Plan
- 2) City Funds: OMB, January 2013 Financial Plan



In addition, the private sector can help develop skills in City workers that improve productivity and efficiency. This should begin with the mayoral transition and continue throughout the term. The city has recently established a nonprofit Technology Development Corporation (TDC) that has created a capacity to attract top talent and reduce outsourcing of tech-related activities. Ultimately, changes in outdated state civil service rules will be necessary to staff government appropriately, but in the interim the TDC is an important vehicle for attracting needed expertise and moving government information technology functions to a new level of efficiency and quality.

Reform Property Tax

Property taxes make up nearly 45% of the city's revenues, but the system is opaque and skewed toward serving political rather than economic or fiscal needs. ¹⁷⁶ Current tax laws include tax caps, abatement programs, varying assessment rates and formulas that favor owner-occupied properties at the expense of rentals, commercial uses and utilities. Redesign of the system is needed to create a more fair and transparent tax regime that aligns with the city's priorities and captures market value in its assessments.

Property tax exemption and abatement programs accounted for approximately \$4.6 billion in foregone city revenue in FY2013.¹⁷⁷ There is a need to update these programs to ensure they are reaching intended beneficiaries. New York City's not-for-profit property tax exemption accounted for an approximate \$1.8 billion in additional forgone revenue in FY2013.¹⁷⁸ New

York should join other cities, including Boston and Chicago, in reviewing whether some nonprofit institutions should be contributing payments in lieu of property taxes.¹⁷⁹

Evaluate City-Owned Property for Revenue Potential & Economic Development

There is no central inventory of City-owned land and buildings, gathered by someone other than the agency which holds them. Such an inventory should be compiled and reviewed by an independent commission, with an eye toward adaptive reuse, sale or other disposition. This would include real estate, air rights, facilities and services where the disposition could result in net revenues, reduced expenditures or more optimal use. Past efforts to create an inventory have failed because they relied on turf-conscious agencies to identify these assets. This has to be a search that is conducted by a group that has no agency interests and draws on private sector expertise.

Redesign Community Service Delivery for "Collective Impact"

Economically disadvantaged communities are typically poorly served by the current system of government funding and multiple delivery channels for a range of health, educational, workforce development and community services. There are several initiatives in New York that are developing alternative models for better coordinating government and philanthropic resources to achieve "collective impact." The Partnership for New York City has joined with the United Federation of Teachers, the New York



City Council, the Children's Aid Society, Trinity Wall Street, United Way and other nonprofit intermediaries to advance a school-based model for delivery of services and measuring results of various interventions. The Governor's Education Commission and Executive Budget recommended a competitive grant to encourage this type of reform in the service delivery system in neighborhoods where, despite very costly interventions, the outcomes are wanting.¹⁸⁰ The 2013–14 New York State Budget includes \$15 million supporting this approach statewide.¹⁸¹

As government resources are less available, the need to get service providers into a single, more effective delivery system is critical and schools provide a locus for connecting families to service providers that is probably the best available. In response to fiscal constraints, City and State agencies should review pilot projects and create a system for integrated funding, service delivery and performance evaluation in high needs communities.

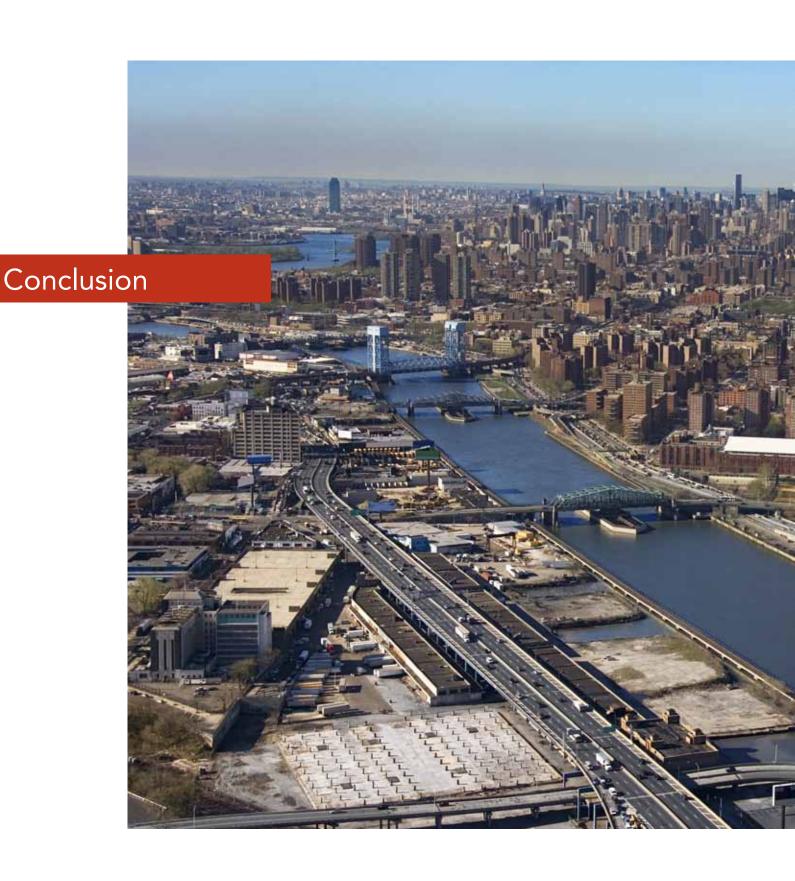
Mobilize Business-Labor-Citizen Lobbying Efforts to Support the City's Agenda in Washington, DC & Albany

In many respects, Albany and Washington, DC present the biggest challenges to the city as it attempts to sustain economic growth, create more and better private sector jobs and retain its status as the global capital of business and finance. New York City tax payers continue to send much more revenue to the state and federal treasuries than the city gets back in the form of aid or services. New York City takes the

brunt when state and federal government fail to provide local government with the discretion and flexibility required to run the city in an efficient and cost-effective way.

Mayor Bloomberg annually provided business leaders with a wallet card with bullet points outlining the city's Washington, DC agenda, ranging from housing and school aid to immigration reform and Homeland Security funding. When elected officials from around the country asked these executives for campaign contributions, they were instructed to pull out the card and recite the city's priorities. This turned out to be a pretty effective way to deliver the New York message.

In both Washington and Albany, it is hard to get the city's agenda enacted unless business and labor are on the same page. The success of business-labor lobbying efforts was recently demonstrated with the passage of \$60 billion in federal storm recovery funds, as it was in securing federal funding for recovery from 9/11 and the blocking of the Congressional proposal to eliminate public transit from the Highway Trust Fund. 182 In Albany, business and labor joined forces to end the wasteful Empire Zones Program and replace it with the Excelsior Jobs Credit. As fiscal pressures increase on the state and federal government, there will need to be a more formal, on-going coalition of business, labor and civic leaders to help the next Mayor achieve the city's agenda in Washington, DC and Albany. This is happening with respect to immigration reform, but must be extended to other areas such as fiscal reform.





As the business and financial capital of America and the world, New York City should be the world's most prolific locus of job creation, economic opportunity and upward mobility. While it may be a truism that the private sector, not government, is the creator of jobs in America, job creation in the 21st Century depends on a partnership between the private sector, educational institutions, organized labor and government. With partnerships in place, New York City can be a job-generating giant.

This Blueprint describes how the Bloomberg Administration approached job creation partnerships: by articulating a clear vision of New York's future as a leader in the global innovation economy; by investing in long-term planning and the public infrastructure required to pursue that vision; by effectively managing municipal services to make the city safer and more attractive to the talent required to execute on that vision; and by leveraging the city's commercial, educational, civic and cultural assets to make the realization of that vision as expansive and inclusive as possible.

Despite many achievements, New York City can

more effectively exploit its job-generating poten-

tial. That will require working with global corporations to retain middle-income jobs and helping entrepreneurial companies to grow here. It will mean incentivizing educational institutions to prepare students for the technologically demanding realities of the 21st Century workplace.

This Blueprint suggests that future leaders of city government should build on the solid foundation for job creation and economic growth established during the Bloomberg Administration, but also acknowledges the different and more demanding fiscal and competitive challenges that will confront the next Mayor. These challenges will require new thinking about program and policy and more aggressive partnerships with industry, organized labor, and educational, medical and civic institutions.







The specific recommendations of this Blueprint derive from hundreds of conversations with business and community leaders, policy experts and goverment officials, but the conclusions are those of the Partnership for New York City and its constituency of employers, corporate and entrepreneurial, across all industry sectors. The Partnership's "big picture" position as to what is required to maintain New York City as a thriving center of job creation and economic opportunity can be summarized as follows:

- New York City and New York State must offer a more competitive tax, legal and regulatory environment. New York is in danger of losing its brand as a business and financial capital if relationships between government and business are adversarial. Global economic and political shifts are making Asia and the developing world a practical alternative headquarters for international business. Smaller cities across North America are competing aggressively for entrepreneurial companies that are creating most of the innovation economy jobs. New York needs to define a compelling new value proposition for job creators or it is going to lose them.
- New York's leaders must resurrect the goodwill between business, government and organized labor that served the city well for many years. Cooperation of all three is needed to solve the city's fiscal problems and achieve needed reforms in Albany and Washington, DC. Furthermore, in a city where one in four workers is a union member, labor leaders must be engaged in professional development of this substantial group of New Yorkers, many of whom have been left behind by the innovation economy.
- Career preparation and technical skills must take center stage at every level of public education. Public education is the vehicle for upward mobility and entry to the middle class. The city's educational institutions are not providing growth industries with the numbers

- of skilled workers they need, nor are they offering realistic hope for a secure, well-paying job to most public high school and community college graduates. Government must insist on new, performance-based funding formulas, professional development of faculty, and a strong role for industry partnerships.
- Affordability, along with quality education, is
 the precondition for reaffirming New York's
 status as a city of opportunity. New York is
 losing middle-income jobs and households
 because they can no longer afford to live
 here, primarily due to the high cost of
 housing. The City must work with industry
 and labor to expand the housing inventory
 and reduce housing costs, applying the most
 creative minds to find solutions and secure
 state legislative and financial support for
 implementing them.
- Finally, city government's ability to rise to the challenges of the next decade will depend on the quality of the people who lead and manage its agencies, programs and partnership relationships. City Hall cannot hope to effectively run this complex enterprise if it relies on political patronage to fill jobs. A transition mechanism should be established that finds the best possible private and public sector talent to serve in a government that will need to meet unprecedented demands with diminishing resources.

This Blueprint was developed in the hope that the next Mayor and the next generation of city leaders, public and private, will benefit from learning what the city's employers and job creators believe are the relevant lessons of the last decade, as well as the risks and opportunities going forward. It is intended to spark constructive dialogue over the policies and programs that will best advance the economic and fiscal interests of the city and its people, ensuring that New York remains a city of opportunity for all.

Endnotes

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- 5 Percent Compound Annual Growth Rate (CAGR) from 2009–11, indexed to 2002, real GDP. International peers include Shanghai, Singapore, Hong Kong, London, Toronto, Sydney, Paris and Berlin and domestic peers include Chicago, Los Angeles, and Silicon Valley. McKinsey analysis of C-GIDD by Canback Dangel and Moody's Analytics.
 - Note: The Compound Annual Growth Rate (CAGR) is the average annual growth rate (positive or negative), or the year-over-year growth rate, calculated by taking the nth root of the total percentage growth rate, where **n** is the number of years in the time period being considered. The equation to calculate % CAGR = (end value / beginning value) ^ (1 / # of years) 1. For example, references to the %CAGR throughout the report may read: "annual rate of growth", "rising X% over the decade", "grew at an annual average rate of X%", or "declined at a rate of X% over the decade".
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